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# NEWFOUNDLAND FOREST FACTS



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NEWFOUNDLAND FOREST RESEARCH CENTRE



## Foreword

This report has been prepared to meet the demand for Newfoundland forestry statistics, both by resource managers and the general public. Statistics are presented which outline the scope of the forest resource and the forest industry in Newfoundland. As well, statistics on other major industries in the Province are provided to allow a direct comparison with the forest industry. In this manner, the importance of the forest industry to Newfoundland's economy is illustrated.

## Avant-Propos

Ce rapport a été préparé pour faire face à la demande des directeurs de ressources aussi bien que du grand public pour certaines données statistiques sur les forêts de Terre-Neuve. On y présente des statistiques qui indiquent l'étendue des ressources des forêts et de l'industrie des forêts à Terre-Neuve. En addition, on y donne des statistiques en ce qui concerne les autres industries majeures de la Province pour faire la comparaison directe avec l'industrie des forêts. De cette façon, on démontre l'importance de l'industrie des forêts pour l'économie de Terre-Neuve.

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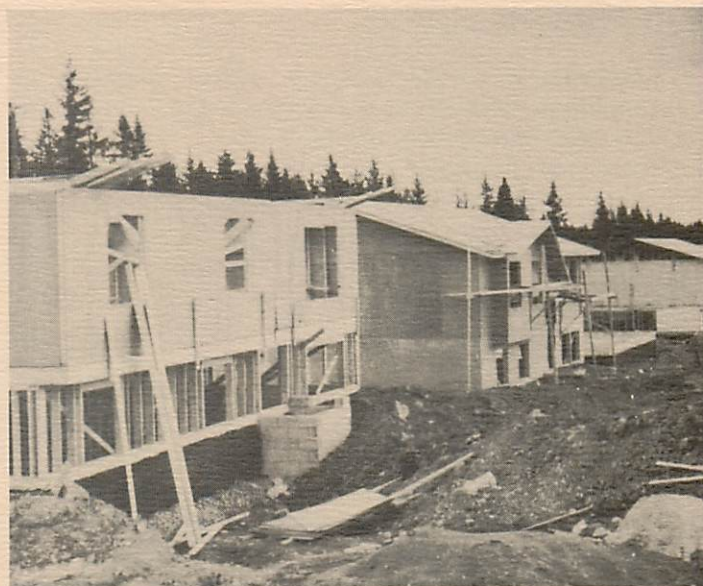
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## Measuring the Importance of Forestry

Forests provide a variety of benefits to society. The economic benefits arising from commercial timber production may be easily measured. They include jobs created and increased incomes. Also, the forest provides many primary products including lumber, plywood, Christmas trees and fibre for paper, which greatly enhance our quality of life. Additional processing creates more employment and incomes plus a wide range of items such as furniture, newsprint and many other paper products. Forests also provide society with benefits such as recreational activity, wildlife habitat and watershed stability. However, these benefits are difficult to measure and are not usually applied in illustrating the importance of forests to society.

Considerable information describing the forest resource and industries it supports is available. This paper summarizes the information and indicates the importance of forestry to Newfoundland. Using the most recent data available, mainly to 1978, four groups of tables are presented. The first group defines the forest land base in terms of land classes, ownership and timber volumes on the Island and Labrador. The second group describes commercial timber production, indicating the scale of logging operations in the Province. The third group provides principal statistics on the forest industry firms with data on employment, expenditures, taxes paid and products manufactured. Finally, the fourth group compares the forest industry with other industries in the Province based



on employment, incomes, value of shipments and value added. The first three criteria are self-explanatory. Value added is calculated as the value of shipments less changes in inventory and costs of power, materials and supplies. Value added is simply another measure of income benefits.

While there are many economic indicators which could have been used to illustrate the importance of forestry to Newfoundland, those presented were chosen by the authors on the basis of available information.

## Statistical Highlights

### Forest Statistics

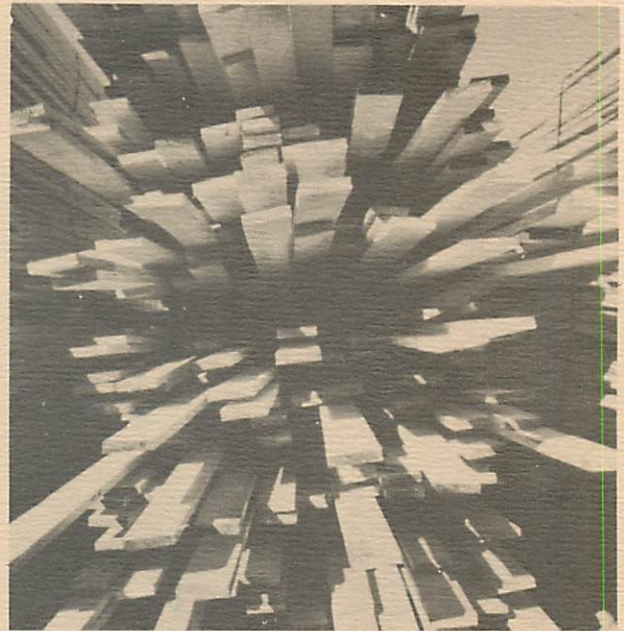
- 1) Productive forest land area in Newfoundland and Labrador is approximately 93 000 km<sup>2</sup>, or 25% of the Province's total land area.
- 2) A total of 88% of this productive forest land area is classified as Provincial Crown land.
- 3) Approximately 24% of the Island's productive forest land area is privately owned.
- 4) In Labrador, 100% of the productive forest area is Provincial Crown land.
- 5) There are an estimated 544 million m<sup>3</sup> of merchantable timber in Newfoundland and Labrador, 91% of which are softwood species.
- 6) Approximately 35% of this merchantable softwood volume lies on the Island.
- 7) During the period 1974 to 1978, annual production of industrial and non-industrial wood fibre averaged 2.5 million m<sup>3</sup> per year.
- 8) More than 80% of this annual production is pulpwood.





## Industry Overview

- 1) According to Statistics Canada figures, there are 71 establishments involved in logging and the manufacture of wood products and newsprint.
- 2) These establishments directly employ 4,276 persons with an annual payroll of over \$76 million.
- 3) Annual expenditures by these establishments on fuel, electricity, materials and supplies exceeds \$100 million.
- 4) The total value of shipments by firms involved in logging and wood products manufacturing is nearly \$300 million.
- 5) During the period 1974 to 1978, forest industry firms and employees paid an annual average of \$16.7 million in Provincial taxes and \$14.3 million in federal taxes.
- 6) During the same period, the forest industry paid an average of \$700,000 in Provincial forestry fees such as licences and cutting permits.



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## Sawmill Statistics

- 1) The Newfoundland Department of Forest Resources and Lands collects detailed statistics on the sawmill industry. These data indicate there are over 1,600 licenced sawmills in the Province with a total annual production of 114 860 m<sup>3</sup> of lumber.
- 2) There are only 14 large sawmills in the Province, each producing more than 1 181 m<sup>3</sup> of lumber annually, however, these sawmills are small when compared to many mainland mills.
- 3) Nearly 64% of Newfoundland's sawmills are of the small, portable, "push-bench" type with an average annual production of 7.4 m<sup>3</sup> per mill.
- 4) The Province's sawmill industry produces 53% of the lumber consumed domestically, with imports making up the difference.





### Pulp and Paper Statistics

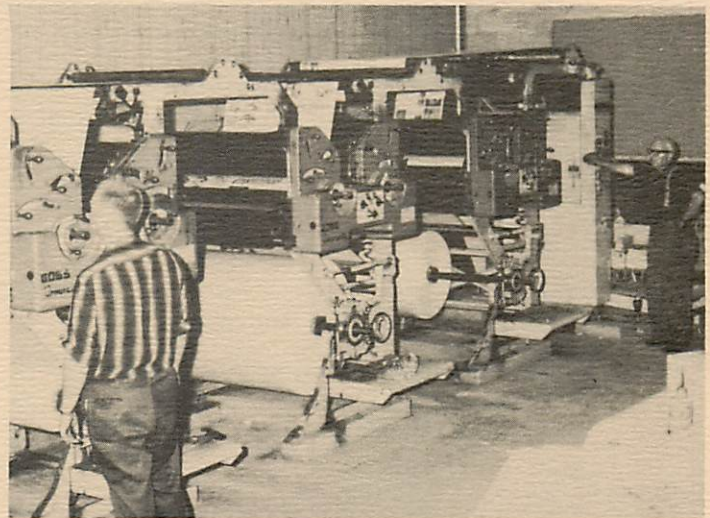
- 1) The Province's two pulp and paper mills produced over 682 000 metric tonnes of newsprint annually.
- 2) Approximately 97% of this output was exported with a value of over \$220 million.
- 3) Major markets for newsprint are the United States (42%) and Great Britain (13%). The remainder is exported to some 25 other countries around the world.



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### Inter-Industry Statistics

- 1) Nearly 8% of the Provincial labour force in the commodity-producing sector is directly employed in forestry and related manufacturing.
- 2) In terms of the labour force in total manufacturing, 18% is employed in pulp and paper mills and various wood industries.
- 3) In 1978, the total annual wages and salaries in primary and secondary forestry activity was approximately \$76 million.
- 4) Wood industries and pulp and paper mills account for 25% of the total value of manufacturing wages and salaries.





## Statistical Tables

### Group I Land Classes, Ownership and Timber volumes

Table 1. Forest Land Area

Area Class	Island	Labrador '000 km <sup>2</sup>	Total
Total land	100	270	370
Forest productive) <sup>a</sup>	38	55 <sup>b</sup>	93
Agriculture	—	—	—
Urban and cleared	1	—	1
Wildland <sup>c</sup>	61	215	276
Water	11	23	34
TOTAL AREA	111	293	404

<sup>a</sup>Land capable of producing a timber stand of 35 m<sup>3</sup> per ha or greater at rotation age.

<sup>b</sup>Figure comprised of 36 000 km<sup>2</sup> from areas surveyed, and 19 000 km<sup>2</sup> estimated for unsurveyed areas.

<sup>c</sup>Includes non-productive forest and non-forested areas.

Source: a) Newfoundland Department of Forest Resources and Lands  
b) Report of the Newfoundland Federal-Provincial Task Force on Forestry, 1973  
c) Statistics Canada 25-202. Data for 1978.

Table 2. Forest<sup>a</sup> Land Ownership

Ownership Type	Island	Area ( <sup>0</sup> 000 km <sup>2</sup> ) Labrador	Total
Provincial Crown	27	55	82
Federal Crown	2	—	2
Private	9	—	9
TOTAL	38	55	93

<sup>a</sup>Figures refer to productive forest land area.

Source: a) Newfoundland Department of Forest Resources and Lands  
b) Statistics Canada 25-202. Data for 1978.

Table 3. Wood Volume<sup>a</sup> by Species

Species Type	Island <sup>b</sup>	Labrador <sup>c</sup> 000 000 m <sup>3</sup>	Total
Softwood	174	320	494
Hardwood	37	13	50
TOTAL	211	333	544

<sup>a</sup>Volumes refer to gross merchantable volumes of trees, in productive forest stands, excluding bark, roots, branches but including cull. Mortality is excluded from volumes. Volumes include trees with stump (15 cm) and top (8 cm) DOB.

<sup>b</sup>Source: Newfoundland Department of Forest Resources and Lands. 1980. Brief to the Newfoundland and Labrador Royal Commission on forest protection and management.

<sup>c</sup>Source: Newfoundland Forest Service. 1975. Forest inventory statistics of Labrador, 1973. Note. Includes extensive and intensive inventory areas.

### Group II Forest Production

Table 4. Primary Forest Production

Year	Production ( <sup>0</sup> 000 m <sup>3</sup> )
1974	3 211
1975	2 452
1976	2 345
1977	2 195
1978	2 288

Source: Statistics Canada 25-202. Data for 1978.

Table 5. Major Products

Product Type	Volume ( <sup>0</sup> 000 m <sup>3</sup> )
Logs and bolts <sup>a</sup>	261
Pulpwood	1 909
Other roundwood	8
Total industrial <sup>b</sup>	2 178
Other	110
TOTAL PRODUCTION	2 288

<sup>a</sup>Includes some pulpwood.

<sup>b</sup>Includes fuelwood.

Source: Statistics Canada 25-202. Data for 1978.



## Group III Principal Statistics on Forest Industry

Table 6. Principal Statistics

Forest Industry Sector	No. of Estab.	No. of Employees (persons)	Wages & Salaries ('000\$)	Cost of Fuel & Elect. ('000\$)	Cost of Materials & Supplies ('000\$)	Value of Shipments ('000\$)	Value Added ('000\$)
Logging	13	1,324	21,858	1,954	14,770	52,431	37,251
Wood industries	56	414	4,431	417	10,685	17,140	6,345
Sawmills & planning mills <sup>a</sup>	44	207	1,723	75	2,807	5,567	2,764
Other <sup>b</sup>	12	207	2,708	342	7,878	11,573	3,581
Pulp and paper <sup>c</sup>	2	2,538	50,064	11,927	60,223	226,817	142,182
TOTAL	71	4,276	76,353	14,298	85,678	296,388	185,778

<sup>a</sup>Includes only those mills reported to Statistics Canada.

<sup>b</sup>Includes shingle mills, veneer and plywood plants, millwork, box factories, etc.

<sup>c</sup>Data estimated. Pulp and Paper statistics are confidential for 1977 and 1978. Estimates derived from trend line analysis of data published 1961 to 1976. Use of Paper and Allied Industries statistics not possible due to data restriction for previous years.

Source: Statistics Canada 25-202. Data for 1978.



## Newfoundland Forest Facts

Table 7. Estimates of Provincial and Federal Taxes Paid by the Newfoundland Forest Industry Firms and Employees: 1974 to 1978

	1974	1975	1976	1977	1978
1) Provincial Taxes (\$)					
Personal income tax	3 959 438	4 061 339	4 583 372	5 822 337	5 764 324
Corporate income tax	2 270 790	1 704 520	81 690	1 177 500	4 517 170
Retail sales tax	6 696 435	7 952 497	9 135 735	10 054 858	11 428 342
Gasoline, motive and fuel oil tax	337 860	297 303	214 677	166 347	190 890
Forest land management tax	—	615 750	810 500	759 000	886 250
Total Provincial Tax	13 264 523	14 631 409	14 825 974	17 980 042	22 596 086
2) Federal Taxes (\$)					
Personal income tax	9 321 885	9 015 836	10 130 360	8 629 327	8 207 834
Corporate income tax	5 825 960	4 183 970	158 950	2 526 160	8 950 410
Sales tax	1 086 148	849 524	1 040 572	786 073	848 905
Total Federal Tax	16 233 993	14 049 330	11 329 882	11 941 560	18 007 149
Total Provincial and Federal Taxes	29 498 516	28 680 739	26 155 856	29 921 602	40 603 235
3) Provincial Forestry fees: 1974 to 1978					
Cutting permits	5 263	11 848	17 740	22 421	24 819
Sawmill licences	29 942	26 935	18 395	25 829	32 386
Timber rentals	49 454	35 671	31 019	25 842	30 644
Timer stumpage	617 430	768 543	1 005 049	490 301	261 449
TOTAL	702 089	842 997	1 072 203	564 393	349 298

Source: Milne, G. R., 1981. "Estimates of the taxes and fees paid by the Newfoundland forest industry firms and employees: 1974 to 1978". Newfoundland Forest Research Centre, St. John's, Newfoundland. Environment Canada, Forestry Services Information Report N-X-192.



Table 8. Lumber Statistics<sup>a</sup>

Number of Sawmills Licenced	Lumber Production (m <sup>3</sup> )			Estimated Lumber Imports (m <sup>3</sup> )	Total Domestic Lumber Use (m <sup>3</sup> )
	Crown Land	Private Land	Total		
1,600	91 236	23 624	114 860	102 660	217 520

<sup>a</sup>For all licenced sawmills in Newfoundland, including those surveyed by Statistics Canada.

Source: Newfoundland Department of Forest Resources and Lands. Data for 1978.

Table 9. Sawmill Production Statistics

	Annual Mill Production Class (m <sup>3</sup> )							Returns Out- Standing
	0 to 24	25 to 59	60 to 118	119 to 177	178 to 236	237 to 1 180	to 1 180 +	
Annual pro- duction (m <sup>3</sup> )	7 564	8 352	8 685	6 443	7 853	36 539	39 424	114 860
Number of mills	1 016	216	100	44	37	79	14	1,506
Average production/ mill (m <sup>3</sup> )	7.4	38.7	86.9	146.4	212.2	462.5	2 816.0	76.3

Source: Newfoundland Department of Forest Resources and Lands. Data for 1978.

Table 10. Export and Value of Newsprint and Linerboard

Year	Export Newsprint (metric tonnes)	Value (x \$000,000)	Export Linerboard <sup>a</sup> (metric tonnes)	Value (x \$000,000)
1970	752 239	93.3	—	—
1971	590 840	76.2	—	—
1972	640 197	82.1	—	—
1973	759 391	114.5	109 574	15.6
1974	694 407	148.3	194 019	50.8
1975	525 379	133.3	118 744	30.6
1976	566 020	151.3	121 205	27.5
1977	678 492	201.6	149 422	25.6
1978	682 195	222.1	—	—

<sup>a</sup>Linerboard mill began production in 1973 and closed in 1977.

Source: Newfoundland Department of Forest Resources and Lands.



## Group IV Forest Industries Compared to Others

Table II. Estimates of Employees by Industry

Industry Sector	Employment (persons)	% of Industry Sector	% of Commodity Plus Service Producing Sectors
A. COMMODITY PRODUCING			
		Commodity	
1.0 Primary			
1.1 Agriculture	1,100	2.0	0.7
1.2 Forestry	1,324	2.4	0.8
1.3 Fishing	26,474	47.8	16.8
1.4 Mining	3,640	6.6	2.3
Total	32,538	58.8	20.6
2.0 Manufacturing			
2.1 Wood industries	414	0.7	0.3
2.2 Pulp and paper mills	2,538	4.6	1.6
2.3 Fish products	8,161	14.7	5.2
2.4 Other	5,014	9.1	3.2
Total	16,127	29.1	10.3
3.0 Construction	6,700	12.1	4.3
TOTAL COMMODITY	55,365	100.0 <sup>a</sup>	35.2
B. SERVICE PRODUCING			
		Service	
1.0 Community, business and personal service	41,800	41.0	26.6
2.0 Trade	25,000	24.5	15.9
3.0 Public administration	13,700	13.4	8.7
4.0 Transportation, communication and other utilities	17,000	16.7	10.8
5.0 Finance, insurance and real estate	4,500	4.4	2.9
TOTAL SERVICE	102,000	100.0 <sup>a</sup>	64.9
TOTAL COMMODITY + SERVICE SECTORS	157,365		100.0 <sup>a</sup>

<sup>a</sup>Totals may not add to 100.0% due to rounding.

Source: Newfoundland Statistics Agency, 1979. Historical statistics of Newfoundland and Labrador, Vol. II. Data for 1978.



Table 12. Inter-industry Comparisons — Primary

Industry Sector	Employment (persons)	% of Total	Wages and Salaries (\$000,000)	% of Total	Value of Shipments (\$000,000)	% of Total	Value Added (\$000,000)	% of Total
Agriculture	1,100	3.4	4.1	3.1	22.2	2.8	17.5	3.5
Forestry	1,324	4.1	21.9	16.5	52.4	6.6	37.3	7.4
Fishing	26,474	81.4	26.6	20.1	118.2	14.9	118.8	23.4
Mining	3,640	11.2	80.0	60.3	601.6	75.7	333.3	65.8
TOTAL	32,538	100.0 <sup>a</sup>	132.6	100.0	794.4	100.0	506.9	100.0 <sup>a</sup>

<sup>a</sup>Totals may not add to 100% due to rounding.

Source: Newfoundland Statistics Agency, 1979. Historical statistics of Newfoundland and Labrador, Vol. II. Data for 1978.

Table 13. Inter-industry Comparisons — Manufacturing

Industry Sector	Employment (persons)	% of Total	Wages and Salaries (\$000,000)	% of Total	Value of Shipments (\$000,000)	% of Total	Value Added (\$000,000)	% of Total
Wood industries	414	2.6	4.4	2.1	17.1	2.0	6.3	1.6
Pulp and paper mills	2,538	15.7	50.1	23.4	226.8	27.0	142.2	36.0
Fish products	8,161	50.6	84.3	39.4	261.4	31.1	123.5	31.3
Other	5,014	31.1	75.2	35.1	335.7	39.9	122.8	31.1
TOTAL	16,127	100.0	214.0	100.0	841.0	100.0	394.8	100.0

Source: Newfoundland Statistics Agency, 1979. Historical statistics of Newfoundland and Labrador Vol. II. Data for 1978.



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