THE SOCIAL AND ECONOMIC EFFECTS OF THE TRANSITION FROM A SYSTEM OF WOODS CAMPS TO A SYSTEM OF COMMUTING IN THE NEWFOUNDLAND PULPWOOD INDUSTRY

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by

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This thesis has been examined and approved by:

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ABSTRACT

This study is an attempt to determine the impact of a technological change within the Newfoundland pulp and paper industry. This change is affecting the industry, the labour force, communities, and the province in general.

The position of the forest industries in the economy of Newfoundland is briefly outlined, with emphasis on the pulpwood producing sector. The organization and physical methods of operation are also described, including living conditions in woods camps. The employment and earnings of the logging force in Newfoundland are compared to those of mill workers, as well as to those of their counterparts elsewhere in Canada. The social and economic effects of commuting upon the loggers are then explained. The economic advantages and disadvantages to the paper companies are outlined, as well as effects upon the remainder of the province. Some of the material for this study has been gleaned from published and unpublished sources, but the major part was obtained from personal interviews and a mail questionnaire to a sample of the loggers.

The most important findings of this thesis are

(1) although the forest industries are still the most important of the resource industries, they are declining in relative importance;

(2) the number of workers employed in logging continues to decline with increased mechanization and higher productivity per worker;

(3) although wage rates of loggers in Newfoundland compare favourably with those of loggers elsewhere in Eastern Canada, annual earnings are relatively low because of the brief period of employment;

(4) living conditions in company camps are generally satisfactory;

(5) mechanization is part of a program to achieve year-round logging: this will benefit the industry and the loggers that remain employed, but mechanization is already creating unemployment;

(6) commuting is generally advantageous to the companies, especially in reducing the cost of wood;

(7) commuting has had some serious economic and social effects upon some loggers, but it has aided others. It has caused some regional unemployment, and tends to shorten the average period of employment;

(8) working conditions under commuting have ranged from extremely bad to favourable. Shacking, while extended by commuting, is most likely a temporary phenomenon;

(9) unless the pulpwood industry expands, centralization is not likely to be a solution to the employment problems of the loggers now living in outlying areas;

(10) while the loggers who were contacted indicated a strong preference for camps, there are indications that in the future loggers will prefer commuting;

(11.) despite the short run disadvantages, commuting should tend to make the industry more efficient; consequently the whole province will benefit.

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and Paper Mills, Limited unhesitatingly gave me several days of their valuable time. Both companies were very considerate in providing transportation to one or more of their logging camps. Mr. Lloyd Goudie, President of Local 2564 of The United Brotherhood of Carpenters and Joiners of America, was particularly helpful in the preparation of a list of members of his union, and in discussing labour problems. However, my deepest appreciation is reserved for the some two hundred loggers who completed a laborious questionnaire.

This enumeration by no means exhausts the list of those who were instrumental in making this thesis possible. I extend my thanks individually to those who have not been mentioned.

Robert D. Peters.

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CHAPTER I

INTRODUCTION

Selection of Topic

In the more advanced economic studies at Memorial University of Newfoundland emphasis is being placed upon natural resources and their development: it is hoped that the various economic investigations may assist in achieving optimal resource use in the Province of Newfoundland and Labrador. Forestry was chosen as a field of study primarily because it was a neglected area of economic research, and secondarily because of my interest in and familiarity with operations in the forests. The topic was selected after consultation with the Chief Forester of the Department of Mines, Agriculture, and Resources in the Provincial Government.

Aims and Purposes

This thesis is a brief survey of the pulpwood industry in the island of Newfoundland, and an attempt to determine the impact of a technological change on the industry, the labour force, and the remainder of the Province. This study does not purport to be a comprehensive analysis of all aspects of the pulpwood industry in the Province of

Newfoundland and Labrador.[1]

Research and Method of Approach

Statistical data and other information for this study have been secured from (a) published and unpublished sources, (b) interviews with officials of the industry, labour, communities, and various government departments, and (c) a mail questionnaire to a sample of the labour force normally employed in logging.

This study began in the academic year 1963-64 with the preparation and testing of the questionnaire. The first mailing was in May, with a second in June to those who had not responded. Field work was done mostly during June, July, and August. Several visits were made to the offices of the Anglo-Newfoundland Development Company, Limited at Grand Falls, and Bowater's Newfoundland Pulp and Paper Mills, Limited at Corner Brook and Deer Lake.[2] Visits were also made to one logging camp in each of the Millertown and Badger Divisions of the A.N.D. Company, to a camp operated by Bowater's in the Hampden area, and to the operation of a contractor. Discussions were held with foremen, contractors, loggers, and others during these visits and at other times.

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[1]Throughout this thesis "Newfoundland" refers to insular Newfoundland, except in data published by the Dominion Bureau of Statistics, where Labrador is included. However, this does not affect the analyses since almost the entire forest industry to date is located on the island of Newfoundland.

[2]Hereinafter the names of these two pulp and paper companies are abbreviated in order to achieve a more even flow of language.

Chapter II briefly describes the position of the forest industries in the economy of Newfoundland, with emphasis on the primary sector of the pulp and paper industry. This is important for a balanced appreciation of the implications of the technological change under consideration. Chapter III describes in some detail the organization and methods of operation of the pulpwood industry. The full import of the subsequent material depends upon a basic understanding of the conditions under which loggers live and work. Chapter IV is concerned with various aspects of the whole woods labour force. Comparisons of employment and earnings are made between the logging and manufacturing sectors of the pulp and paper industry in Newfoundland, and between the industry in Newfoundland and the rest of Canada. In Chapter V comparisons are drawn between campers and commuters, based on information received from the questionnaires. Some social and economic effects of commuting are discussed in Chapter VI. This is followed by a summary and conclusion.

A number of detailed statistical tables are assembled in Appendix A. Appendix B consists of a description of the sampling techniques, and some of the results obtained. Extracts from the 1964-1966 Woods Labour Agreement are given in Appendix C. Appendix D is a partial glossary of words and phrases in common use within the industry. It has been necessary to use such terms because this thesis is local and somewhat descriptive. The use of the glossary prevents the text from being interrupted by frequent and lengthy footnotes

and explanations. Not all the words and phrases in Appendix D are used in the text.

Supporting Data

Considerable problems were encountered in evaluating data collected because of conflicting sources. It was impossible to reconcile completely certain data from the paper companies, the Provincial Department of Mines, Agriculture and Resources, and the Dominion Bureau of Statistics (D.B.S.). Generally, however, the Dominion Bureau of Statistics offered the most extensive sets of data, and are therefore widely used in this thesis. Unfortunately, D.B.S. data frequently are inadequate for a local study because of insufficient detail. Some important statistics were obtained from the paper companies, but other information which might have been useful to this study was confidential. Besides, the companies had never recorded certain statistics that were requested.

The results from the questionnaire could not be extended to the entire population because the sample was not proven to be statistically valid. Reasons for this are fully described in Appendix B.

Since this thesis deals with social as well as economic factors, it contains general opinions of some persons closely connected with the communities and the people. Such qualitative material proved useful as an alternative to quantitative data which could not be obtained.

mills are owned by financial interests outside the province.[1] The Grand Falls mill of the Anglo-Newfoundland Development Company, Limited was owned by the Harmsworth interests in England, but was purchased in 1962 by Price Brothers & Company, Limited of Montreal. This mill went into production in late 1909. At present it has an average daily capacity of approximately 900 tons of paper. The Corner Brook mill of the Bowater's Newfoundland Pulp and Paper Mills, Limited began operations in 1925 under the Newfoundland Power and Paper Company, Limited. It was subsequently purchased in 1926 by the International Power and Paper Company, Incorporated who sold its interests to the Bowater organization in 1938. This mill now has an average daily capacity of 1300 tons of paper.[2] These two companies are responsible for almost the entire pulpwood production of the province. About ninety to ninety-five per cent of the annual production is consumed domestically, while the balance is exported, chiefly to the United Kingdom. A small quantity of export wood is produced by other companies.

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[1] The large sums of money required to finance the construction of these mills could not be raised in Newfoundland. National savings were much too small. The revenue of the government in 1900 was only $2.1 million, while the A.N.D. Co., Ltd. spent over $6 million in the year 1905-1909 alone.

[2] Source: Special untitled paper printed by Bowater's Newfoundland Pulp and Paper Mills, Limited for the West Coast Agriculture and Homecrafts Fair, Sept. 16-19, 1964, p. 5. This paper is hereinafter called Souvenir Paper.

The economic life of this province is built upon the exploitation of its natural resources. Expansion or contraction of its resource industries induces expansion or contraction of other forms of economic activity such as the service industries. Forest exploitation has been the most important resource industry for some decades, but it is losing ground to mining.

Gross Domestic Product

Table 1 shows the estimated contributions of the various industries to the gross domestic product of Newfoundland for 1951 and 1956. Forest industries contributed fourteen per cent in 1956, followed by mining with eleven per cent and fishing with six per cent. Table 1 also shows that the importance of forest industries decreased from twenty-one per cent to fourteen per cent, representing a decrease in value from forty-five million dollars to forty-three million dollars. The relative decline in importance results largely from the gains in mining (from nine per cent to eleven per cent), from increases in other commodity production, and from increases in the tertiary industries. Even the primary producing sector of the forest industries contributed more than fishing, which is popularly regarded as the base of the Newfoundland economy.

Net Value of Commodity Production

Net value of commodity production provides another measure of the importance of the various industries.

TABLE 1

ESTIMATED GROSS DOMESTIC PRODUCT OF NEWFOUNDLAND,

BY INDUSTRY, 1951 AND 1956

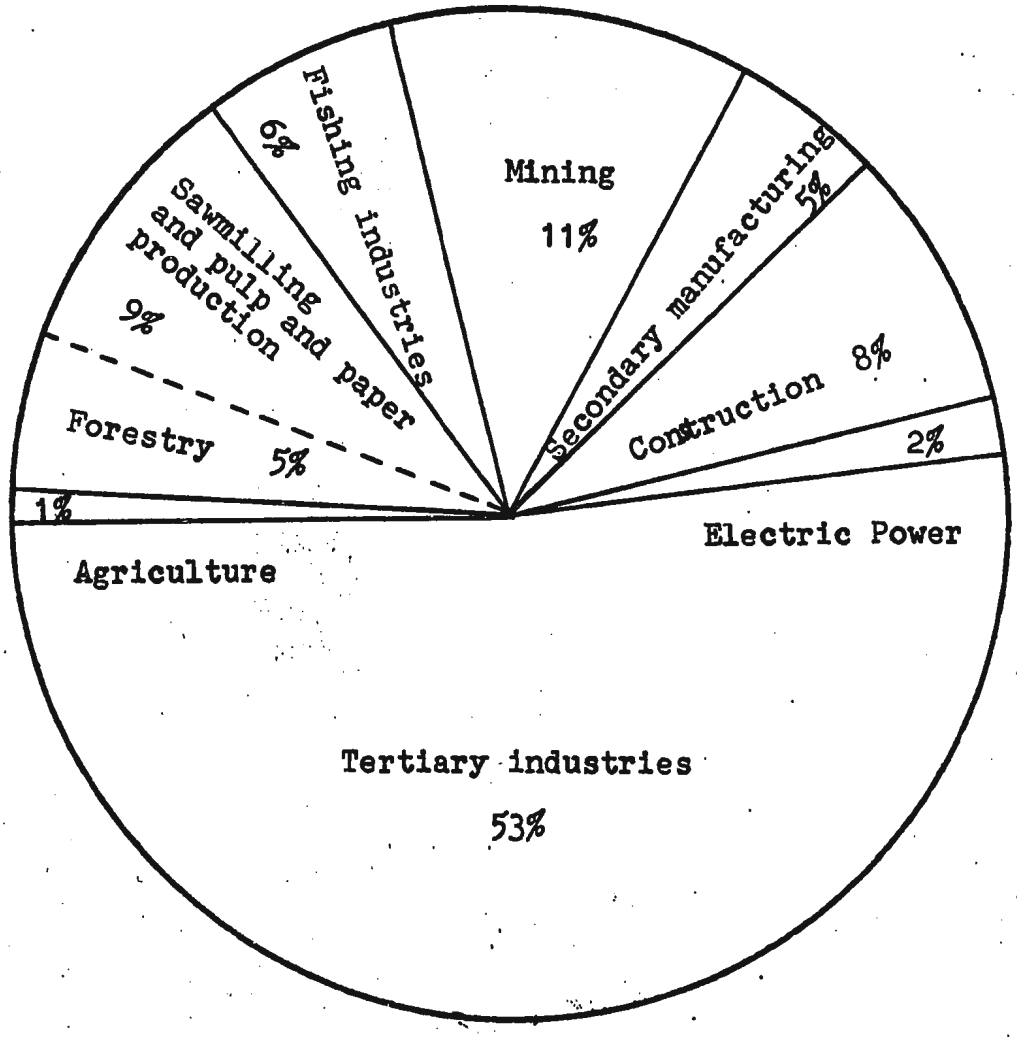
	1951		1956	
	Millions of dollars	Per cent of total[1]	Millions of dollars	Per cent of total[1]
Total, all industries	210	100	310	100
Total, resource industries	86	41	100.5	32
Agriculture	5	2	4	1
Forest industries	45	21	43	14
Forestry (chiefly logging)	18	9	16	5
Sawmilling and pulp and paper production	27	13	27	9
Fishing industries	17	8	18.5	6
Fishing	11	5	11.5	4
Fish processing	6	3	7	2
Mining	19	9	35	11
Total, secondary manufacturing	8	4	14	5
Total, other commodity production	16	8	32.5	10
Electric power	3	1	7.5	2
Construction	13	6	25	8
Total, tertiary industries	100	48	163	53
Transportation, storage, and communication	33.5	16	56	18
Wholesale trade	10	5	15	5
Retail trade	21	10	35	11
Finance, insurance, and real estate	3.5	2	6	2
Government service	17	8	27	9
Community and commercial service	15	7	24	8

Note: 1. Figures do not add precisely because they were rounded individually.

Source: P. Copes, St. John's and Newfoundland, An Economic Survey (St. John's: Guardian, Limited, 1961), p. 153, Table 1.1.

FIGURE 1

PERCENTAGE DISTRIBUTION OF THE GROSS DOMESTIC PRODUCT OF NEWFOUNDLAND, 1956



Source: Table 1.

Tables 1 and 2 of Appendix A also indicate that forest industries are declining in importance. The net value of total commodity production increased from $153 million in 1952 to over $261 million in 1961, while the net value of production of forest industries remained fairly constant around $60 million: a decline for forest industries from 39.0 per cent to 23.1 per cent of total commodity production. Mining is the next most important resource industry (20.5 per cent).

Between 1961 and 1964 the rapid expansion of mining was in strong contrast to the relatively stationary forest industries. The expansion of the pulp and paper industry into Labrador and the construction of a third mill in insular Newfoundland should have a stimulating effect on the forest sector of the economy, thereby helping it to maintain its present status.

Newfoundland Production Compared to Canadian Production

The Newfoundland mills are individually among the largest integrated pulp and paper mills in Canada, but the net value of Newfoundland production is less than five per cent of the national figure. It declined from 5.5 per cent in 1951[3] to 3.9 per cent in 1959, but rose to 4.7 per cent in 1961 (see Table 2). This indicates that Canadian production is expanding more rapidly than Newfoundland production.

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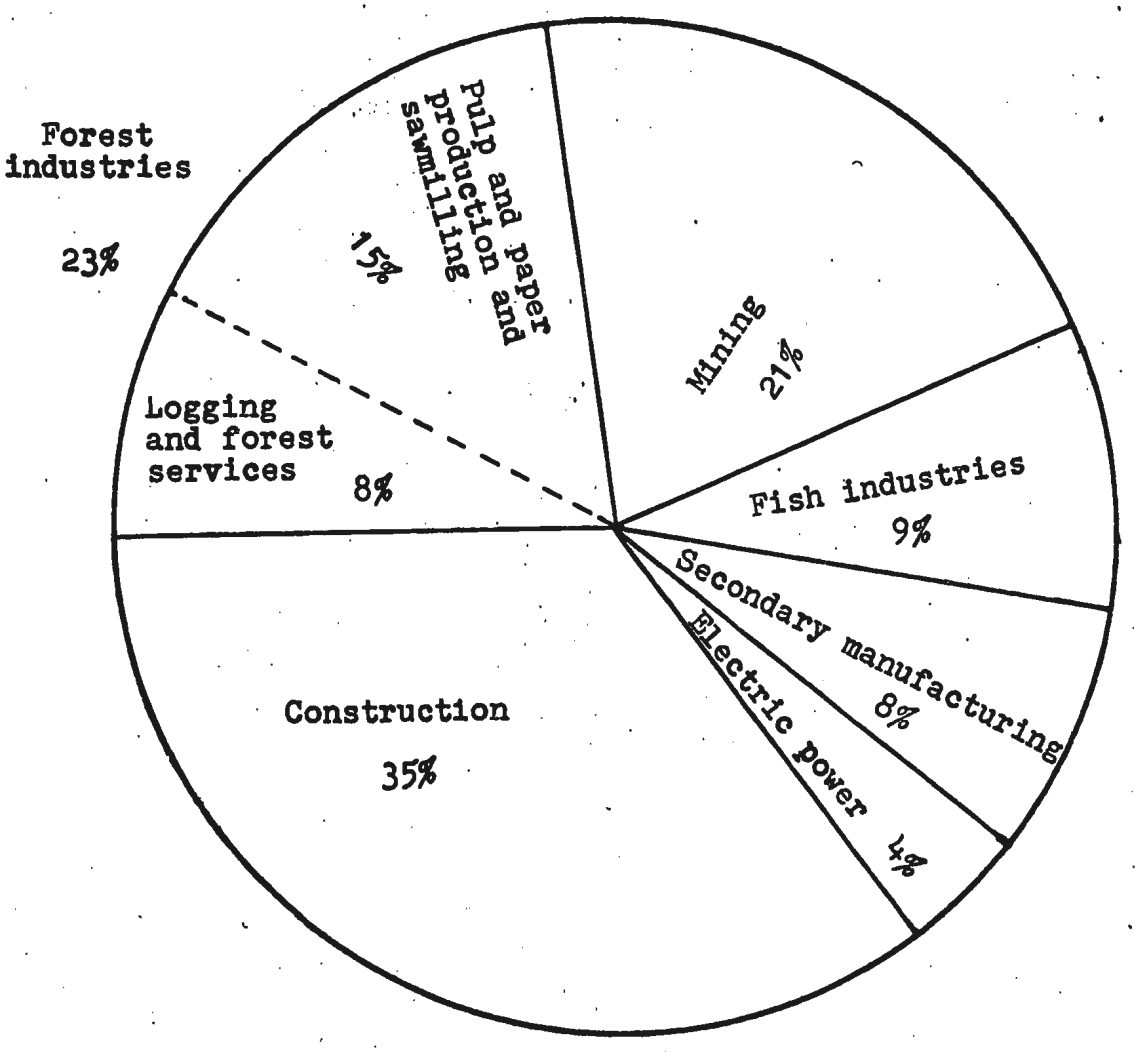
[3]The 1951 figure is calculated from the Report of the Newfoundland Royal Commission on Forestry, 1955 (St. John's: Queen's Printer, 1955), p. 213, Table 1.

FIGURE 2

PERCENTAGE DISTRIBUTION OF THE NET VALUE OF COMMODITY PRODUCTION IN NEWFOUNDLAND, 1961



Source: Table 2 of Appendix A.

TABLE 2

NET VALUE OF PRODUCTION OF PULP AND PAPER MILLS IN NEWFOUNDLAND AND IN CANADA, 1954 - 1961

Year	Newfoundland	Canada	Nfld. as per cent of Canada
	(thousands of dollars)		
1954	34,455	641,517	5.4
1955	32,668	689,818	4.7
1956	35,444	736,346	4.8
1957	30,608	693,476	4.4
1958	29,702	705,569	4.2
1959	29,784	762,884	3.9
1960	34,504	814,798	4.2
1961	39,225	842,420	4.7

Source: D.B.S., The Pulp and Paper Industry, 1955, and 1957, Table B; Pulp and Paper Mills, 1961, Table 1B.

It must be noted, however, that these percentages relate to dollar values, and that mainland mills have been expanding in the production of higher price specialized paper products. Newfoundland production consists almost entirely of newsprint. In terms of tons, Newfoundland newsprint production dropped from 8.7 per cent of the Canadian total in 1953 to 8.4 per cent in 1961 even though output for this province increased by approximately twelve per cent (see Table 3). For the years 1955-1959 Newfoundland contributed only slightly over two per cent of the net value of production of all forest industries in Canada. During this period its annual percentage contribution was also declining (see Table 4).

TABLE 3

NEWSPRINT PRODUCTION FOR SELECTED PROVINCES AND FOR CANADA, 1953 - 1961

Year	Canada	Nova Scotia New Brunswick	Nfld.	Nfld. as per cent of Canada
1953	5,721	372	507	8.7
1954	5,984	386	527	8.8
1955	6,191	392	528	8.5
1956	6,469	406	544	8.4
1957	6,397	407	510	8.0
1958	6,096	390	488	8.0
1959	6,394	388	500	7.8
1960	6,739	388	552	8.2
1961	6,735	381	568	8.4

Source: Adapted from Atlantic Provinces Economic Council, The Atlantic Provinces Statistical Review, May 1963, p. 59.

TABLE 4

NET VALUE OF THE FOREST INDUSTRIES IN NEWFOUNDLAND AND IN CANADA, 1955 - 1959

Year	Nfld.	Canada	Nfld. as per cent of Canada
	(thousands of dollars)		
1955	60,267	2,228,233	2.7
1956	62,733	2,396,284	2.6
1957	54,983	2,196,882	2.5
1958	53,293	2,086,387	2.6
1959	53,165	2,284,147	2.3

Source: D.B.S., Canadian Forestry Statistics, 1961, Table 31.

Pulpwood Production

Table 5 shows the increasingly overwelming importance of pulpwood among the products of the forests of Newfoundland. In 1949 it accounted for seventy-three per cent of the total value of wood cut; in 1957 eighty-two per cent, and in 1961 eighty-four per cent.

At this point it is helpful to examine the pulpwood production figures for the province as given in Table 6 and shown on Figure 3. These annual figures depict considerable variation. In 1962 the production of pulpwood was the lowest

TABLE 5

WOODS PRODUCTION IN NEWFOUNDLAND, BY PRODUCT, 1949 - 1961

Year	Quantity in millions of cubic feet	Pulpwood		Fuelwood		Sawlogs		Others		Total
		Value in thousands of dollars	Per cent of total	Value in thousands of dollars	Per cent of total	Value in thousands of dollars	Per cent of total	Value in thousands of dollars	Per cent of total	
1949	97	13,158	72.9	2,623	14.5	991	5.5	1,272	7.0	18,044
1950	113	19,168	81.1	2,637	11.2	1,360	5.8	460	1.9	23,621
1951	121	24,501	82.2	3,130	10.5	1,749	5.9	423	1.4	29,804
1952	102	19,842	80.4	2,580	10.5	1,852	7.5	392	1.6	24,666
1953	114	23,641	83.2	3,095	10.9	1,382	4.9	284	1.0	28,402
1954	100	20,081	82.8	2,743	11.3	1,152	4.8	276	1.1	24,252
1955	112	22,579	80.5	2,694	9.6	1,543	5.5	234	0.8	28,050
1956	105	22,157	83.1	2,755	10.3	1,538	5.8	216	0.8	26,667
1957	98	19,438	81.9	2,607	11.0	1,544	6.5	143	0.6	23,732
1958	84	17,770	80.2	2,915	13.2	1,372	6.2	93	0.4	22,150
1959	97	18,672	82.0	2,475	10.9	1,530	6.7	94	0.4	22,771
1960	127	27,783	86.3	2,500	7.8	1,800	5.6	111	0.3	32,194
1961	98	21,707	83.6	2,430	9.4	1,702	6.6	122	0.5	25,961

Source: P. Copes, St. John's and Newfoundland, An Economic Survey, p. 162, Table 3.1; D.B.S., Logging, 1958 - 1961, Table 1.

TABLE 6

PULPWOOD PRODUCTION IN NEWFOUNDLAND,

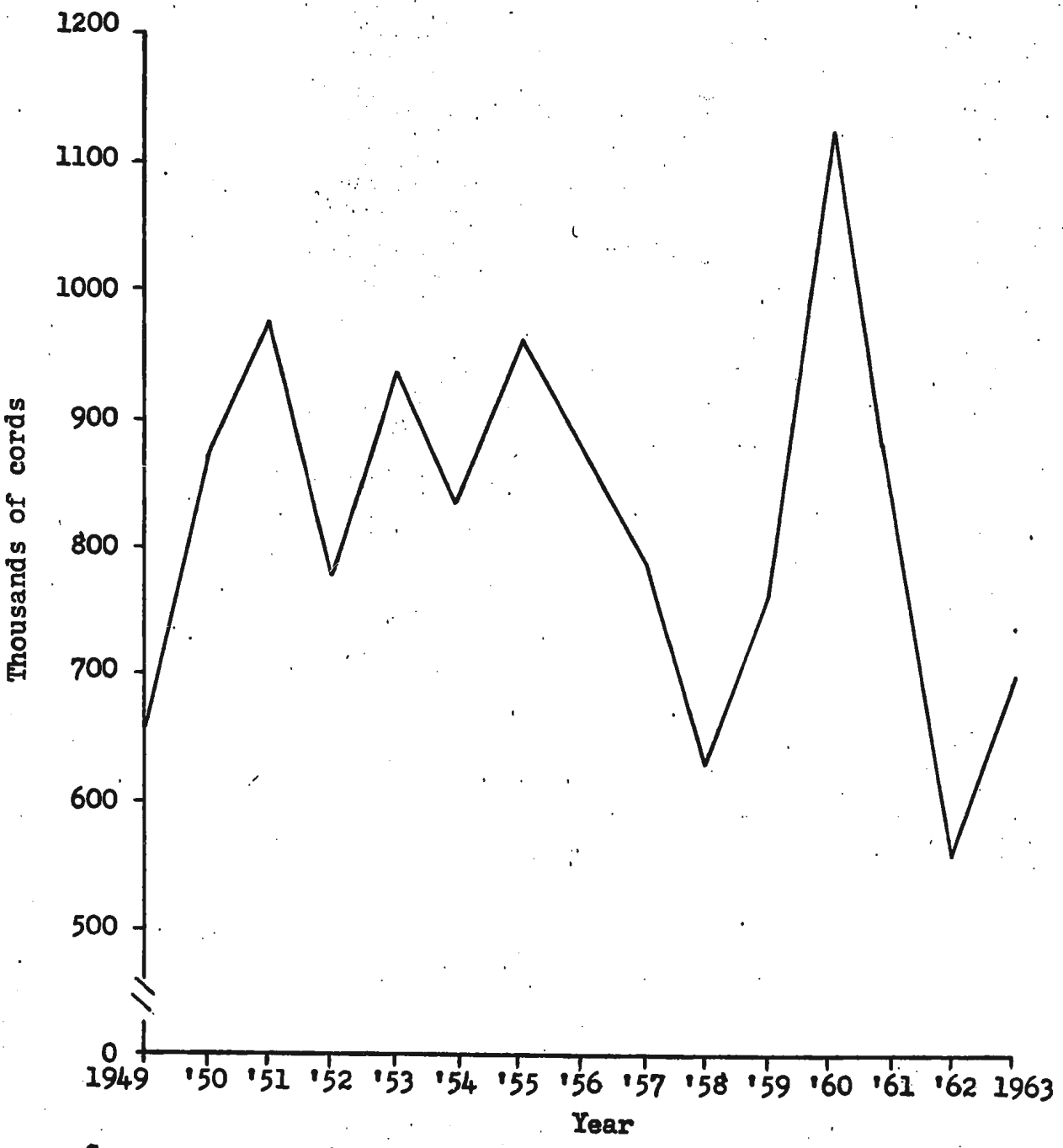
1949 - 1963

Year	Cords	Per cent change from previous year
1949	652,024	-
1950	869,982	+33.4
1951	979,130	+12.5
1952	776,241	-20.7
1953	935,555	+20.5
1954	835,081	-10.7
1955	963,194	+15.3
1956	878,913	- 8.8
1957	793,387	- 9.7
1958	628,576	-20.8
1959	763,684	+21.5
1960	1,134,000	+48.5
1961	820,665	-27.6
1962	557,558	-32.1
1963	708,497	+27.1

Source: D.B.S., Operations in the Woods, Revised Estimates of Forest Production, 1940 - 1953, Final Estimates 1954 - 1955, Table 7; Operations in the Woods, 1956 - 1959, Table 1; Logging, 1962 - 1963, Table 1; Annual Report of the Department of Mines, Agriculture and Resources, 1963 (St. John's), pp. 37-38; and "Logging Camp Inspection Report for 1963" (D.M.A.R.).

FIGURE 3

PULPWOOD PRODUCTION IN NEWFOUNDLAND, 1949-1963



Source: Table 6.

since the Second World War.[4] The most striking feature is the fluctuations over the period 1957-1963. The 1958 cut was just over 600,000 rough cords, but by 1960 the cut was increased to over 1,100,000 cords, and by 1962 it had fallen to around 550,000 cords. Several factors during this period may have contributed to these fluctuations. 1957-1958 was a recession period, and the low cut in 1958 may have been caused by the high inventories in that year (see Table 5 of Appendix A). Labour troubles occurred in the woods in the winter of 1958-1959, causing inventories to drop in May 1959 to the lowest point for the period January 1958 to December 1962. The recovery from the recession year and from the labour troubles was shown in higher productions for 1959 and 1960. Inventories at the end of 1960 were the highest for the period under review, and the cut in 1961 was understandably low. In addition, the summer of 1961 experienced one of the worst forest fire seasons on record. Since 1962 cuts have been low partly because of the desire to reduce inventories, particularly on the part of Bowater's (see Table 7). This aspect will be discussed later. In summary, Table 5 of Appendix A and Table 6 above emphasize that annual and seasonal fluctuations in production have been large. Since it may be assumed that employment in the woods varies directly with

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[4] For the figures for the years 1945-1948 see the Report of the Newfoundland Royal Commission on Forestry, 1955, p. 31.

pulpwood production,[5] it also must have fluctuated considerably.

TABLE 7

PULPWOOD INVENTORIES OF BOWATER'S AND THE A.N.D. CO., LTD., 1960 - 1963

Date		Bowater's	A.N.D.	Total
		(1) (quantities in rough cords)	(2)	(3)
April	1960	661,275	428,090	1,089,365
April	1961	539,396	659,942	1,199,338
April	1962	400,651	716,823	1,117,474
December	1963	271,343	599,378	870,721

Source: Column (1) from Bowater's Woods Department; Column (3) from Table 5 of Appendix A; Column (2) is Column (3) - Column (1).

Employment and Labour Income

It has been stated that "the most important aspect of an industry, from the standpoint of our own welfare, is the income it generates through salaries and wages, returns to working proprietors and self-employed operators, and profits

[5]The A.N.D. Co., Ltd. estimates their average production per total man day to be slightly over one cord. Bowater's estimates their average production per total man day to be slightly less than one cord. For the province, then, it is not unduly inaccurate to say that each cord of wood produced generates one man day of employment for loggers.

retained by investors resident in the province".[6] Most of the profits of the large and highly capitalized industries in Newfoundland, such as mining and pulp and paper manufacturing, go to the non-resident owners. No statistics are available on the returns to working proprietors and self-employed operators. In assessing the importance of the forest industries it therefore remains only to examine the number of persons employed and the wages and salaries paid out by the various industries in this province.

Table 8 and Figure 4 show that in 1961 the forest industries were the largest employers among the resource industries. They employed 10.4 per cent of the labour force, which represented 11,701 persons. Of these 3,499 were employed in the manufacture of pulp and paper and in allied industries, 6,891 were employed in forestry, and 1,311 in other wood-using industries. Of those employed in forestry 5,748 were classified as "loggers and related workers" (see Table 9).

Between 1951 and 1961 the total number employed in the forest industries declined from 16,728 to 11,701 workers, a decrease of thirty per cent. The relative decline was from 15.9 per cent to 10.4 per cent of the total labour force, which increased by ten per cent over the ten years.[7]

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[6] P. Copes, St. John's and Newfoundland, An Economic Survey, (St. John's: Guardian, Limited, 1961), p. 14.

[7] Source of 1951 figures: P. Copes, op. cit., p. 210, Table 16.1.

TABLE 8

LABOUR FORCE, 15 YEARS OF AGE AND OVER,

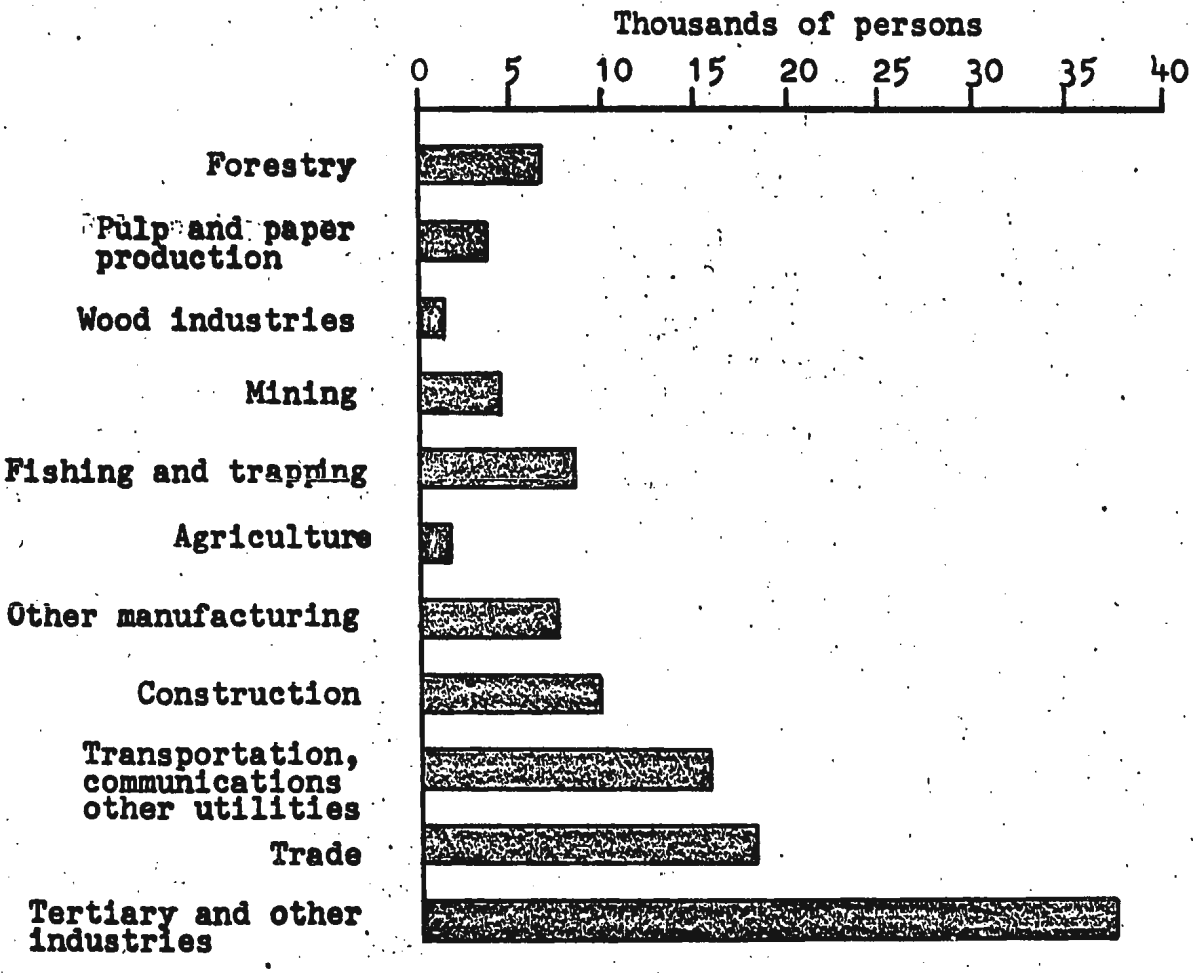
BY INDUSTRY, IN NEWFOUNDLAND, 1961

Industry	Number	Per cent
All industries	112,310	100.0
Agriculture	1,641	1.5
Forestry	6,891	6.1
Fishing and trapping	8,389	7.5
Mines, quarries, oil wells	4,293	3.8
Manufacturing industries	12,168	10.8
Food and beverages	4,871	4.3
Wood industries	1,311	1.2
Paper and allied industries	3,499	3.1
Other industries	2,487	2.2
Construction industries	9,525	8.4
Transportation, communication, and other utilities	15,213	13.5
Trade	18,928	16.6
Tertiary and other industries	35,262	31.4

Source: Calculated from D.B.S., Census of Canada, 1961, Vol. III, Part 2, Table 11.

FIGURE 4

NUMBER OF PERSONS ENGAGED IN VARIOUS SECTORS OF THE ECONOMY OF NEWFOUNDLAND, 1961



Source: Table 8.

TABLE 9

LABOUR FORCE, 15 YEARS OF AGE AND OVER, BY OCCUPATION AND SEX, IN NEWFOUNDLAND, 1961

Occupation	Male	Female	Total	Per cent of total
Managerial	6,896	1,807	8,603	7.7
Professional and technical	4,793	4,685	9.478	8.4
Clerical	5,332	4,491	9,823	8.7
Sales	3,509	3,627	7,136	6.4
Service and recreation	6,692	6,520	13,212	11.8
Transport and communications	8,523	501	9,024	8.0
Farmers and farm workers	1,606	88	1,694	1.5
Loggers and related workers	5,746	2	5,748	5.1
Fishermen, trappers, and hunters	8.167	16	8,183	7.3
Miners, quarrymen and related workers	2,213	-	2,213	2.0
Craftsmen, production process, and related workers	24,581	1,036	25,617	22.8
Other labourers	7,571	94	7,665	6.8
Occupation not stated	3,073	741	3,814	3.4
All occupations	88,702	23,608	112,310	100.0

Source: D.B.S., Census of Canada, 1961, Vol. III, Part 1, Table 17.

The greatest decline was in the logging sector, where employment was thirty-five per cent below the 1951 figure. This was partly because of the decline in the volume of pulpwood produced (about fifteen per cent), and partly because of increased productivity per man day. Increased productivity resulted from technological changes in methods of cutting, hauling, and transporting of pulpwood. The most important innovation was the power saw, which was first introduced on a large scale in 1956. The average production per cutting man day in A.N.D. operations in 1961 was 2.23 cords.[8] Table 10 shows that top loggers average more than this. Indeed, one logger averaged 8.17 cords per day for four days in 1963, earning $59.23 per day![9] Average cutters are now producing nearly as much per day as top men did ten years ago when the "buck saw" was in use.

The pulp and paper industry contains a group of workers whose average income is the highest in the province, and another group whose average annual income is among the lowest (see Table 11 and Figure 5). The combined advantages of higher rates of pay and of year-round employment give the average mill worker an annual income well over two and one-half times that of the average logger. Hence a basic concern of labour leaders is to obtain year-round employment for loggers.

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[8] A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p. 3.

[9] A.N.D. Co., Ltd., News-Log, December, 1962, p. 2.

TABLE 10

AVERAGE DAILY PRODUCTION AND EARNINGS OF SELECTED LOGGERS OF THE A.N.D. CO., LTD., FOR VARIOUS TIME PERIODS WORKED, 1963

Logger	Days worked	Cords cut	Average cords per man day	Average earnings per man day
A	43.5	208.12	4.78	37.94
B	52.5	252.98	4.82	36.40
C	43.5	189.86	4.36	34.61
D	55.6	240.18	4.32	33.82
E	43.5	187.14	4.30	33.86
F	42.5	170.65	4.02	32.04
G	34.6	142.11	4.11	32.77
H	55.1	258.99	4.70	32.01
I	46.0	195.43	4.25	31.95
J	62.1	286.24	4.61	31.39
K	46.8	194.47	4.15	30.81

Source: A.N.D. Co., Ltd., News-Log, September, 1963, p.1.

TABLE 11

EMPLOYMENT[1] AND AVERAGE EARNINGS OF WAGE-EARNERS, 15 YEARS OF AGE AND OVER, BY INDUSTRY AND SEX, FOR NEWFOUNDLAND, DURING THE 12 MONTHS PRIOR TO JUNE 1, 1961

Industry	Total wage-earners		Average earnings		Total male earnings	Total female earnings	Total earnings	Per cent of total earnings	Per cent of wage earners
	Male	Female	Male	Female					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			(dollars)		(thousands of dollars)				
All industries	75,186	20,914	2,823	1,440	211,138[2]	30,161[2]	241,299	100.0	100.0
Agriculture	569	27	1,362	1,077	775	29	804	0.3	0.6
Forestry, total	6,560	9	1,767	622	11,592	6	11,598	4.8	6.8
Logging	6,380	9	1,750	622	11,165	6	11,171	4.6	6.6
Forestry services	180		2,343		422		422	0.2	0.2
Fishing and trapping	2,185	10	1,215	2,310	2,655	23	2,678	1.1	2.3
Mines and quarries	4,221	67	3,925	1,912	16,567	128	16,696	6.9	4.5
Manufacturing, total	10,232	1,317	3,053	1,248	31,238	16,446	32,882	13.6	11.0
Wood industries	885	14	1,880	1,257	1,664	18	1,681	0.7	0.9
Pulp and paper mills	3,346	115	4,793	2,778	16,037	320	16,356	6.8	3.6
Construction	8,804	90	2,130	2,147	18,753	193	18,946	7.9	9.3
Transportation, communication and other utilities	13,165	1,187	2,926	1,553	38,521	1,843	40,364	16.7	14.9
Trade	9,974	4,578	2,819	1,212	28,117	5,549	33,665	14.0	15.1
Finance, insurance and real estate	764	590	4,361	2,005	3,332	1,183	4,515	1.9	1.4
Other service industries	5,386	10,537	2,733	1,346	14,720	14,183	28,903	12.0	16.6
Public administration, defence	10,780	1,799	3,609	2,357	38,905	4,240	43,145	17.9	13.1
Unspecified	2,546	703	2,342	1,622	5,963	1,140	7,103	2.9	3.4

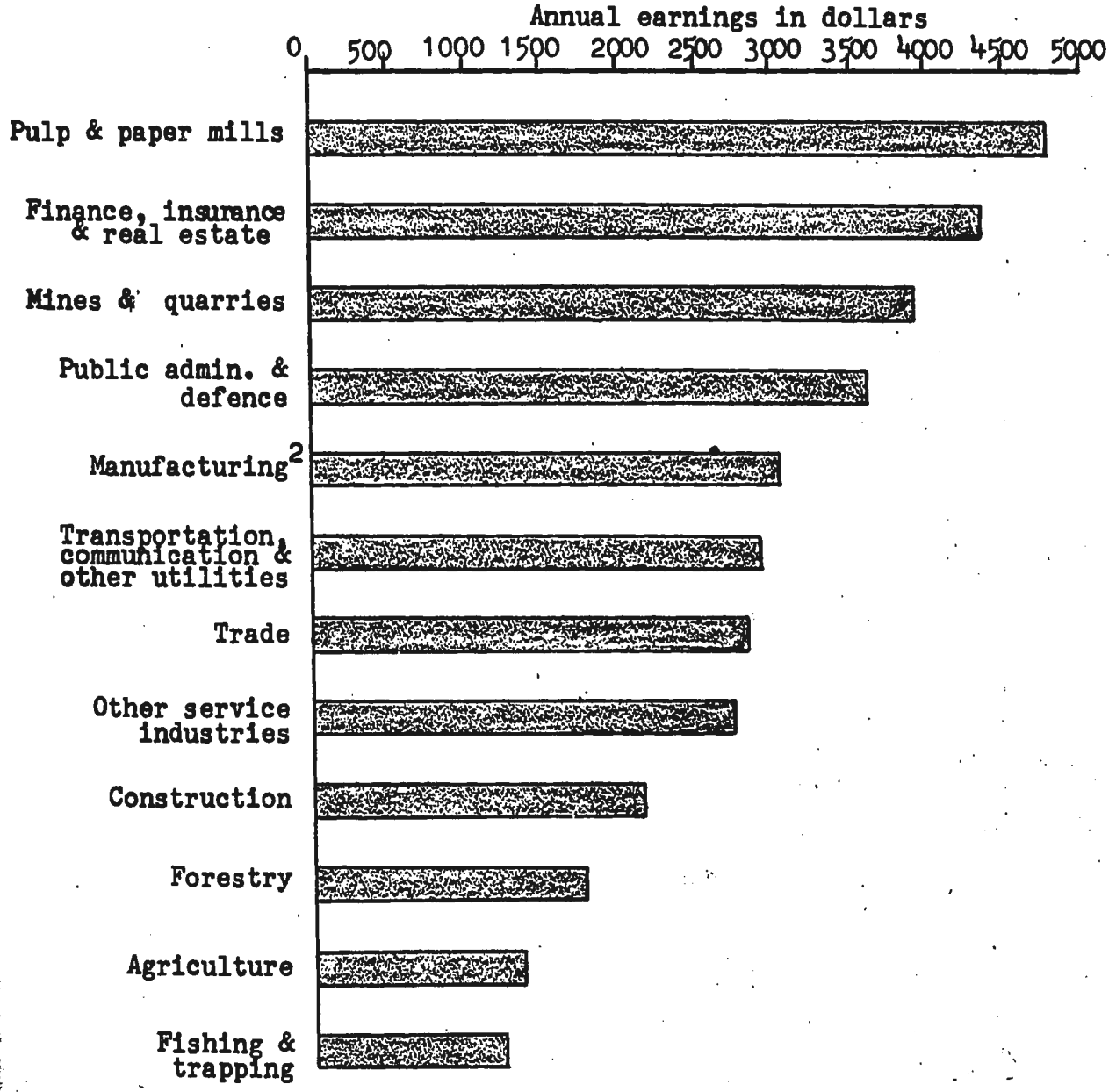
Notes: 1. These figures are lower than those of Table 8 largely because of unemployment and self-employment. A notable case of the latter is the fishing industry. Consequently the percentages of wage-earners is not quite the same as the percentages of the total labour force.

2. These totals are the sums of their respective columns, and vary slightly from the products of Columns (1) and (3) and of Columns (2) and (4).

Source: Calculated from D.B.S., Census of Canada, 1961, Vol. III, Part 3, Table 28.

FIGURE 5

AVERAGE EARNINGS[1] OF MALE WAGE-EARNERS IN NEWFOUNDLAND, BY INDUSTRY, FOR THE TWELVE MONTHS PRIOR TO JUNE 1, 1961

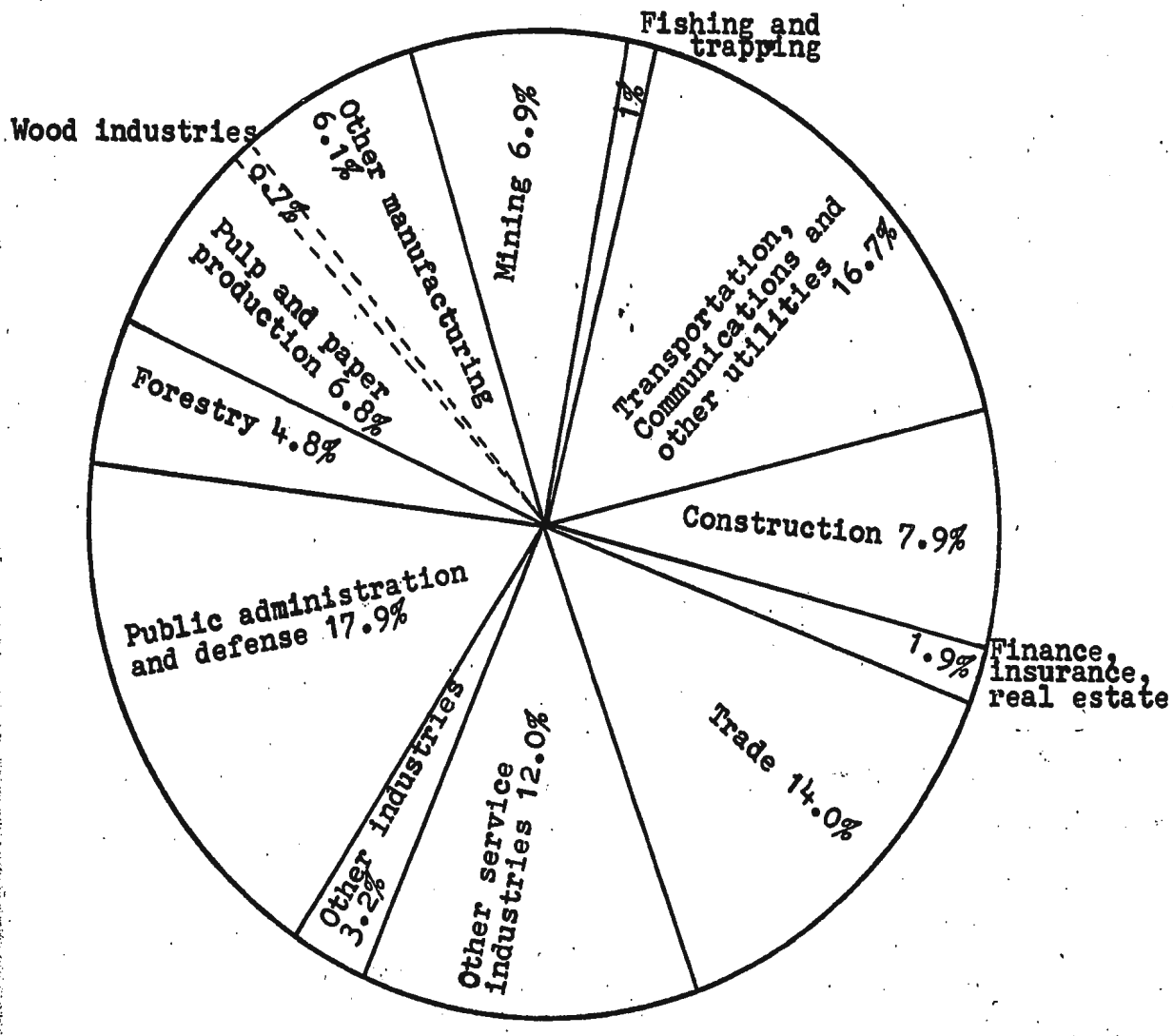


Notes: 1. Ranked in descending order.
2. Includes pulp and paper mills.

Source: Table 11, Column (3).

FIGURE 6

PERCENTAGE DISTRIBUTION OF TOTAL EARNINGS OF WAGE EARNERS IN NEWFOUNDLAND, BY INDUSTRY, 1961



Source: Table 11, Column (8).

In Table 11 the average earned incomes are combined with total employment figures to give the total amount of wages and salaries earned by the workers in the different industries. Figure 6 shows the percentage contributions of the various industries to the total earnings of wage-earners in Newfoundland in 1961. Pulp and paper production and mining accounted for about equal shares of wage payments, with 6.8 and 6.9 per cent respectively. All forest industries, however, accounted for 12.3 per cent of wage payments. This is the largest share contributed by any resource industry, but it is a significant decline from 1951 when forest industries contributed over one-fifth of the total wage payments.[10] This decline has taken place despite the fact that total wage payments of the forest industries have increased.

Conclusion

From this brief survey it is evident that the forest industries are of crucial importance to the economy of this province. They contributed approximately fourteen per cent of its gross domestic product in 1956, and the present figure is probably around eleven or twelve per cent. Of the net value of commodity production in 1961 forest industries accounted for almost one-quarter. They employ about ten per cent of the labour force and annually pay out some ten to twelve per cent of the wages and salaries earned by

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[10] P. Copes, op. cit., p. 14.

Newfoundlanders. The pulp and paper industry is slowly expanding, but the forest industries as a group are gradually declining in importance. Any change, technological or other, which affects this industry is of considerable importance to the province, and its short and long run effects need consideration.

CHAPTER III

PRESENT ORGANIZATION AND METHODS OF OPERATION OF THE PULPWOOD INDUSTRY

Economics of the Location of Pulp and Paper Mills

The manufacture of pulp and paper may be called an input oriented industry since it tends to be located near the source of its raw materials, of which pulpwood is of overwhelming importance. Since pulpwood is bulky and loses much of its weight through manufacture, the advantage of minimizing the distance over which it must be transported is obvious. Access to an adequate and cheap supply of wood is a basic condition for the location of a mill. Some other very important factors are supplies of labour, power, and fresh water, as well as access to markets.

Timber Limits

The island of Newfoundland has a total area of 43,359 square miles, of which 21,719 square miles are forested. Of the forest area fifty-seven per cent, or 12,996 square miles, is considered to be productive (see Table 12). The two major paper companies have timber rights on about three-quarters of the forest land.[1]

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[1] P. Copes, op. cit., p. 81.

TABLE 12

LAND CLASSIFICATION IN NEWFOUNDLAND, 1961

	(thousands of acres)	(thousands of square miles)
Forested land:		
Accessible productive:		
Softwood - merchantable	4,237	6,619
- young growth	3,217	5,025
Mixed wood - merchantable	247	386
- young growth	166	259
Hardwood - merchantable	3	47
- young growth	140	2,187
Unclassified[1]	215	3,359
Total accessible	8,225	12,849
Potentially accessible	94	147
Total productive	8,319	12,996
Non-productive	6,269	9,793
Total forested land	14,588	22,789
Non-forested land	11,757	18,366
Total land area	26,345	41,164[2]
Total water area		2,195
Total area		43,359

Notes: 1. Includes area of recent burn, or windfall, not yet re-stocked.

2. This figure does not agree exactly with the sum of the figures above it largely because of rounding errors.

Source: D.B.S., Canadian Forestry Statistics, 1961, Table 1.

Bowater's rights extend to 12,180 square miles, of which 2,206 square miles is freehold land, the balance being Crown Land on which they hold timber licenses.[2] The A.N.D. Co., Ltd. holds rights to 7,558 square miles.[3] The A.N.D. Company, which was established before Bowater's, was able to secure more concentrated holdings. They are located chiefly on the Exploits River drainage area, with smaller holdings at Hall's Bay, Terra Nova, and on the Great Northern Peninsula. Bowater's holdings, on the other hand, are more scattered: their largest holdings are on the west coast, particularly in the Humber and Harry's River valleys. They also have holdings in the area drained by the Gander River, at Indian Bay, and on the Great Northern Peninsula.[4] The west coast forests are predominantly fir, and the terrain is generally more difficult than in central and eastern Newfoundland where spruce predominates.

Divisional Operations

The woods operations of the companies are spread throughout their timber holdings. The A.N.D. Company

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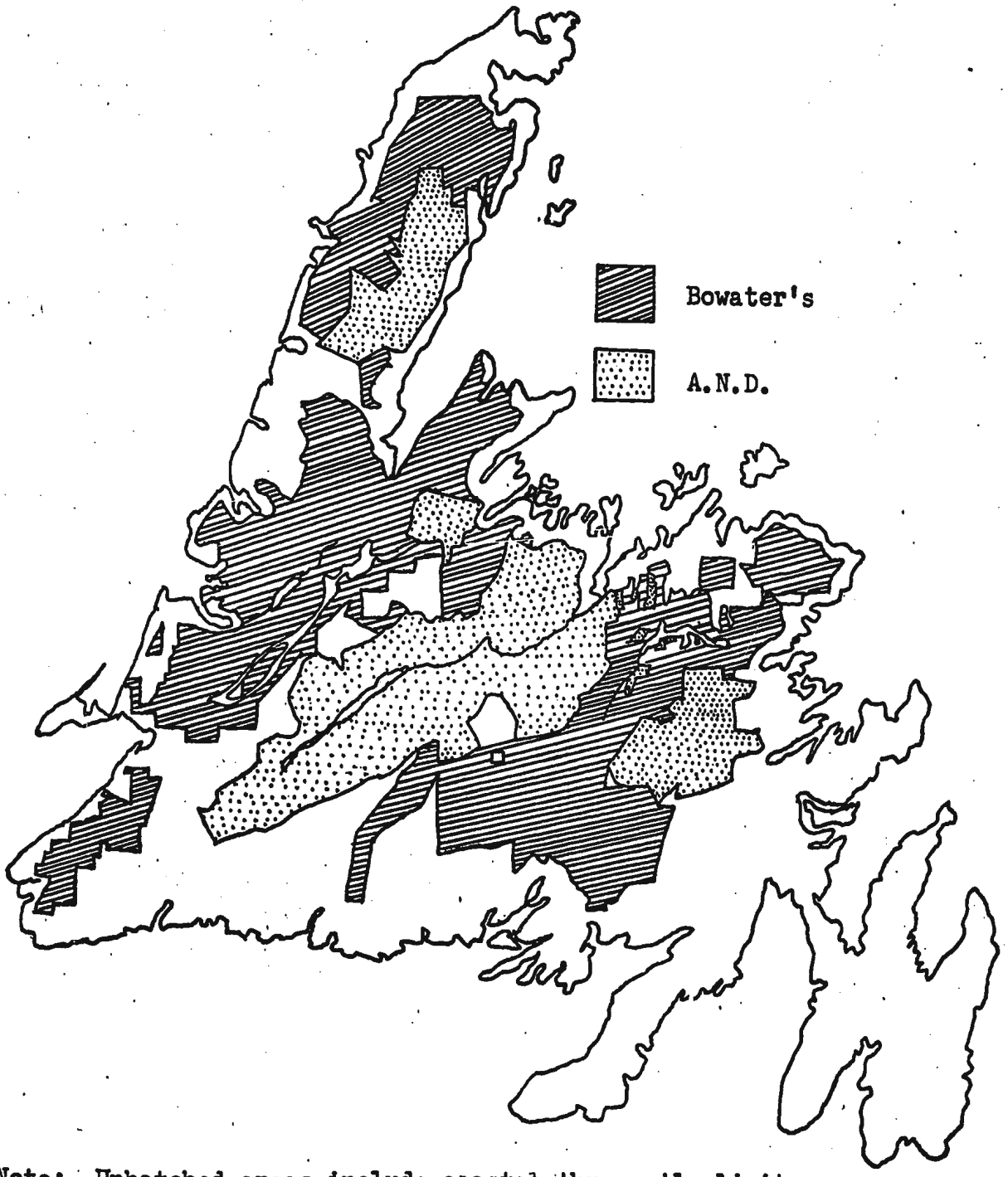
[2] Bowater's Newfoundland Pulp and Paper Mills, Ltd., Souvenir Paper, op. cit., p. 2.

[3] A.N.D. Co., Ltd., Facts and Figures, No. 5, January, 1962, p. 11.

[4] See Figure 7 for all areas.

FIGURE 7

TIMBER LIMITS OF BOWATER'S AND THE A.N.D. COMPANY



Note: Unhatched areas include coastal three-mile limit, Crown Lands, and other minor holdings.

Source: Report of the Newfoundland Royal Commission on Forestry, 1955, Map No. 2.

presently has three woods divisions - Badger, Millertown and Bishop's Falls. Terra Nova has recently been discontinued as a separate division.[5] In 1963 Bowater's operated in the geographical divisions of Deer Lake, Corner Brook, Glenwood, and Hawke's Bay -Labrador. Within their divisions each company has various logging centres, but supervision and administration are carried on through the office in each division. Woods accounting is centralized at Grand Falls by the A.N.D. Company, but Bowater's maintains accounting staff at each divisional office. The logging centres of both companies are shown in Figure 8. One or more cutting operations is located near each logging centre.

The cutting operations of both companies are carried out by foremen or contractors. The A.N.D. Company's operations are mainly handled by their own foremen who are under the control of the central woods department and the divisional offices. The remainder of the work is done by a few contractors. Prior to 1962, Bowater's operated almost entirely on the contract system. Since that date, however, they have been using foremen more extensively.

The main difference between a foreman and a contractor (sometimes called a "jobber") is the degree of financial

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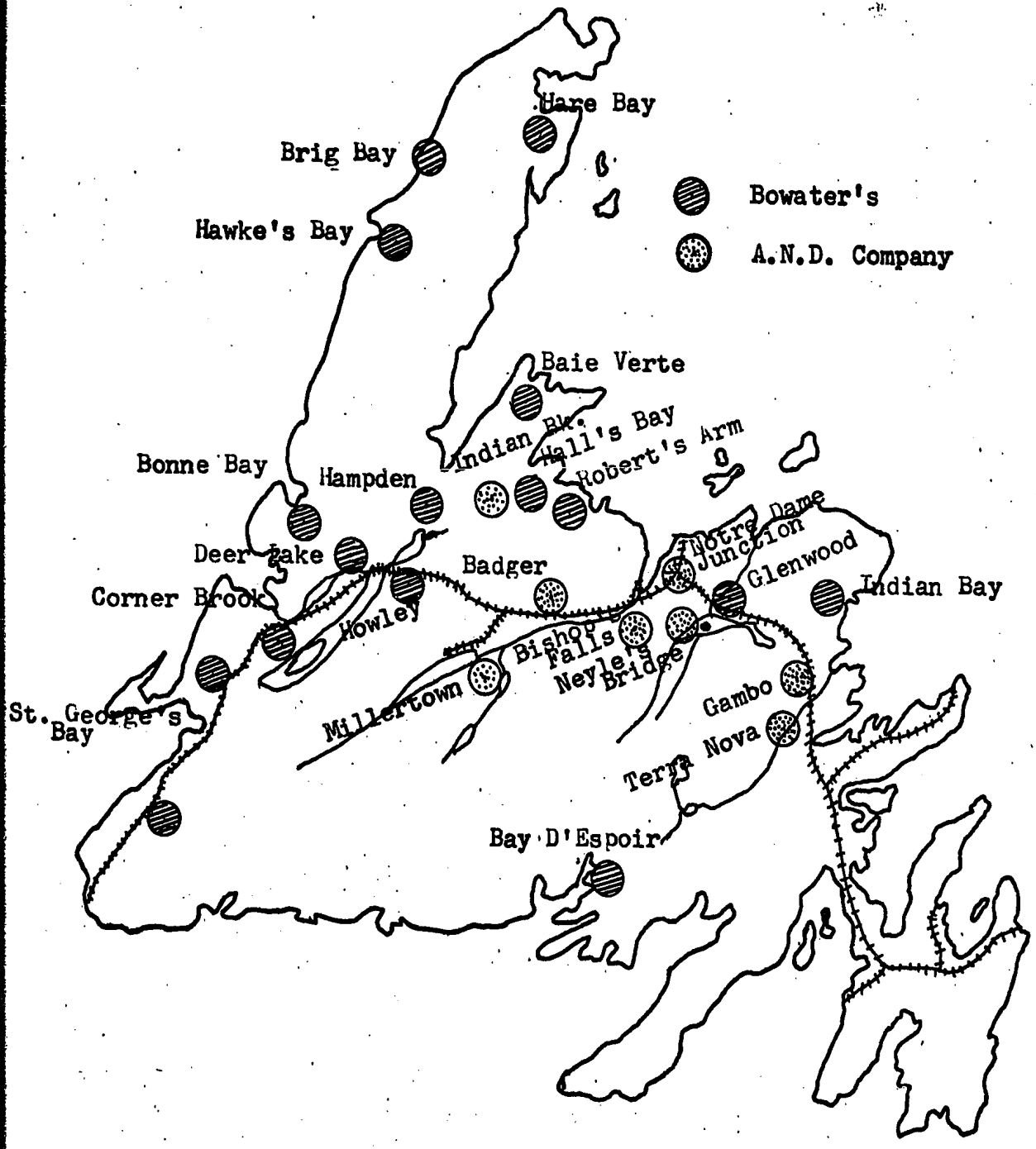
[5] Statistics for 1963 are quoted for three divisions only by the A.N.D. Co., Ltd., in Woods Labour, 1963, and a Comparison with 1961 and 1962, op. cit.

FIGURE 8

LOGGING CENTRES OF BOWATER'S AND THE A.N.D. COMPANY



Source: A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p. 5.

participation in the contract. Thus foremen are paid a monthly salary plus a stated percentage of any profits. The operation is completely financed by the company. Both contractors and foremen receive a stated price per cord for wood delivered to some predetermined points. Contractors, however, generally control their own operations. Their contract price includes an allowance to cover their personal wages and the risks of contracting. Payroll expenditures are financed by the company, but the contractors supply all requirements with the exception of camp buildings.[6] Many contractors receive progress payments at certain intervals on the wood cut or delivered. As members of The Newfoundland Contractors Association they operate under the same labour agreement as the two paper companies.[7]

In addition to wood supplied under contract Bowater's now buys a small amount from jobbers who cut on private lands or by permit on Crown Lands.

Pulpwood Production

The production of pulpwood may be divided into the

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[6]This distinction between a foreman and a jobber was made by Mr. W. Johnston, then Woods Manager of the A.N.D. Co., Ltd., during a panel discussion at the Annual Meeting of the Woodlands Section of the Canadian Pulp and Paper Association held in Montreal on March 22, 23, and 24, 1960. This discussion is reviewed in Pulp and Paper Magazine of Canada, April, 1960, p. 5-161.

[7]For further discussion of the position of contractors, see the Report of the Commission of Enquiry on the Logging Industry, 1960 (St. John's: Queen's Printer, 1960), Part VI.

three functions of cutting, hauling and transporting. Production methods and equipment may change from year to year. Distinction is now made in the industry between conventional logging and tree-length logging.

Under the conventional logging system the foreman or contractor divides the area to be logged into strips of specified widths which are called "roads". Prior to the signing of the 1964 Woods Labour Agreement the width of each of these strips was one hundred feet, but the present permissible widths are narrower. The Woods Agreement states that:

> Strip width shall not exceed 66 feet for 8 ft. wood and 80 feet for 4 ft. wood. On side hill roads wood shall not be handled more than 15 feet on the lower side of what is known as a side hill road. Wood must be piled on the upper side of a side hill road and all piles must be suitable for scaling.[8]

The cutter then proceeds to clear the trees off this strip, cutting them into four or eight foot lengths and piling them in "brows" or "landings" for "scaling". Wood is scaled at the end of every eighteen day period, after which the logger is paid. Cutting is normally done on a piecework basis.

"Cut and bunch" operations differ from "cut and pile" operations in that the wood is haphazardly thrown together in heaps rather than methodically piled. Scaling is done at a later date.

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[8] Article X, Section 10:30, of the Woods Agreement, 1964-1966.

Wood that has been cut is next moved to a main transportation route. This is called the "haul-off", and it may involve different procedures depending upon terrain, distance, weather, and other conditions. Traditionally this was done by horses when the ground was covered with snow, but machines have almost completely replaced the horse in recent years.

On the more difficult terrain wood must be "pre-hauled" to a central location. This is usually done with small crawler tractors or with specially adapted track-type vehicles.[9] This is known as "yarding".

At present much of the wood cut is moved by truck for at least part of the distance between stump and mill. This requires a wide network of roads, especially when trucks load the wood at the spot where it was cut. This "trucking from the stump" can only be carried out efficiently on suitable terrain and during the drier parts of the year. This practice has been open to sharp criticism by conservationists because of the areas denuded by bull-dozers in preparing the truck roads. In addition to the main truck roads the bulldozers clear branch roads one hundred feet apart to give access to the wood cut on each cutting strip. These so-called "roads" are actually only rough paths prepared by pushing off the stumps, larger

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[9] Probably today the most common of these specially adapted vehicles is the J-5 Bombardier.

Figure 9

(A.N.D. Photo)

A cutter at work

rocks, and topsoil. Thus this practice has the added disadvantage of leaving the terrain less suitable for future operations because of the banks of debris. One of the encouraging aspects of recent mechanical innovations is the need for fewer truck roads.

Tree-length logging is now well established in Newfoundland. The Royal Commission on Canada's Economic Prospects forecasted that rubber-tired skidding and tree-length logging would achieve significant results by 1965.[10]

Figure 10

(A.N.D. Photo)

Truck-load of pulpwood being scaled

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[10]Royal Commission on Canada's Economic Prospects, The Outlook for Canadian Forest Industries (Hull, Quebec: Queen's Printer, 1957), p. 211.

Figure 11

(A.N.D. Photo)

Dumping 8-foot wood into the Exploits River

Figure 12

(A.N.D. Photo)

View of loaded truck and dumping area, near Grand Falls

Bowater's first introduced wheeled skidders in the autumn of 1962, and in 1964 had approximately ninety of these machines in the woods. The A.N.D. Company had twenty-six skidders in 1964. Private contractors have also purchased a number of them.

Tree-length logging is carried out in teams, or units. A skidder crew consists of one operator, two "fellers", and two "buckers". The "fellers" saw down the trees and remove the tops and most of the branches. The skidder operator ties up a load of trees, and winches them up to the rear of his machine. He then travels to the "landing" or road where he drops the load. The "buckers" remove the remaining branches, cut the trees into four foot lengths, and pile them, usually on pallets. One skidder and crew produces from fifteen to thirty cords per day, depending upon distance, terrain, and wood supply. Only the heaviest snows significantly hamper operations.[11] This means that year-round logging is more feasible. With these machines Bowater's managed to produce during the winter of 1963-64 sufficient wood to supply most of the day to day requirements of their Corner Brook mill.[12]

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[11] Bowater's experience in the winter of 1962-63 was given by H. Baggs in a paper entitled "Our experience with and the future of rubber-tired skidders on pulpwood operations", presented at the Annual Meeting of the Newfoundland Branch of the Canadian Institute of Forestry at Grand Falls, Dec. 5-6, 1963, as follows: "Snow did not have any great adverse effect on the operation of the skidders; it did slow up in some areas where the operations had over a maximum of thirty inches of snow in the timber".

[12] Bowater World (London: Marshall, Davenport, November 1964), p. 25.

Figure 13

(A.N.D. Photo)

Four-wheel drive skidder taking its load to the landing

In Newfoundland, wood on its way to the mills may travel by road, rail, or water or by any combination of the three. Water has been the traditional method, and the spring drives are legendary. This is the main reason for locating mills near the mouths of rivers having large timber resources in their drainage systems. Both Bowater's and the A.N.D. Company use river systems to great advantage. Wood

has to be towed in booms across the larger lakes, a method also used by Bowater's in certain coastal areas.

The transinsular railway (Canadian National Railways) is used by the A.N.D. Company to move wood from the areas of Badger, Bishop's Falls, and Terra Nova, and by Bowater's to move wood from Badger, Glenwood, and their holdings south of Corner Brook. The railway is mostly used for transportation of wood over long distances or from areas from which the wood cannot be floated by rivers. The long haul from Glenwood across A.N.D. territory to Corner Brook has been justified only on the grounds that a certain proportion of spruce is necessary for the maintenance of the quality of paper.[13] Table 13 gives the quantities of wood delivered to the A.N.D. mill by the various methods for the years 1957-1962.

Road transportation is becoming increasingly important as the system of woods roads and public highways on the island is being expanded and improved. For example, Table 13 indicates that the percentage of wood carried on trucks for the A.N.D. Company rose from 11.5 in 1957-58 to 20.8 in 1961-62. The completion of the paving of the Trans-Canada Highway will aid the pulp and paper industry in the transportation of wood, supplies, and men. Increased mechanization in the forests will also tend to increase the amount of wood

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[13] See page 33.

TABLE 13

QUANTITIES OF WOOD DELIVERED BY VARIOUS METHODS TO THE A.N.D. CO., LTD., 1957 - 1962

Year	Method	DIVISIONS						Per cent of total
		Millertown	Badger	Bishop's Falls	Terra Nova	Other	Total	
		(quantities in rough cords)						
1957-58	River	73,622	60,742	-	-	-	134,364	39.3
	Rail	-	26,375	40,334	80,025	21,549	168,283	49.2
	Truck	-	-	39,415	-	-	39,415	11.5
	Total	73,622	87,117	79,749	80,025	21,549	342,062	100.0
1958-59	River	70,478	62,080	-	-	-	132,558	48.8
	Rail	270	15,430	29,164	57,224	6,332	108,420	40.0
	Truck	-	3,512	26,895	-	-	30,407	11.2
	Total	70,748	81,022	56,059	57,224	6,332	271,385	100.0
1959-60	River	86,181	69,235	-	-	-	155,416	46.3
	Rail	-	19,731	27,708	72,783	1,564	121,786	36.2
	Truck	-	2,422	56,381	-	-	58,803	17.6
	Total	86,181	91,388	84,089	72,783	1,564	336,005	100.0
1960-61	River	102,862	84,679	-	-	-	187,541	53.6
	Rail	-	15,526	26,367	62,358	1,508	105,759	30.2
	Truck	-	8,353	47,990	-	-	56,343	16.1
	Total	102,862	108,558	74,357	62,358	1,508	349,643	100.0
1961-62	River	92,100	91,218	-	-	-	183,318	51.9
	Rail	-	2,052	18,426	74,328	1,391	96,197	27.2
	Truck	-	9,620	63,954	-	-	73,574	20.8
	Total	92,100	102,890	82,380	74,328	1,391	353,089	100.0

Source: H. Inder, "Anglo-Nfld. Development Co., Ltd." (unpublished Bachelor's report, Memorial University of Newfoundland, 1963), Table 6, p. 19.

carried by trucks. Better roads will permit the use of larger trucks carrying bigger payloads at higher speeds. The increasing costs of labour, which tend to preclude the driving of wood on the smaller streams, also encourage the use of trucks. Ultimately, of course, the decision to use any given means of transportation depends upon its influence on profits.

It has been determined that fresh wood makes brighter, or better quality, paper. Fibres are longer and are not coloured as in older wood. Old wood also needs an expensive bleaching agent which requires extra storage and handling facilities and is highly corrosive. Quality is extremely important in this competitive industry where the world supply of newsprint exceeds the demand. This largely explains the drive by Bowater's to obtain a continuous flow of fresh wood from the forests to the mill. A secondary consideration is the release of large sums of capital tied up in mill stockpiles. Therefore, it follows that road and rail transportation of wood may increase considerably in order to obtain dependable and regular supplies. The existing systems of transportation in Newfoundland are shown on Figure 14.

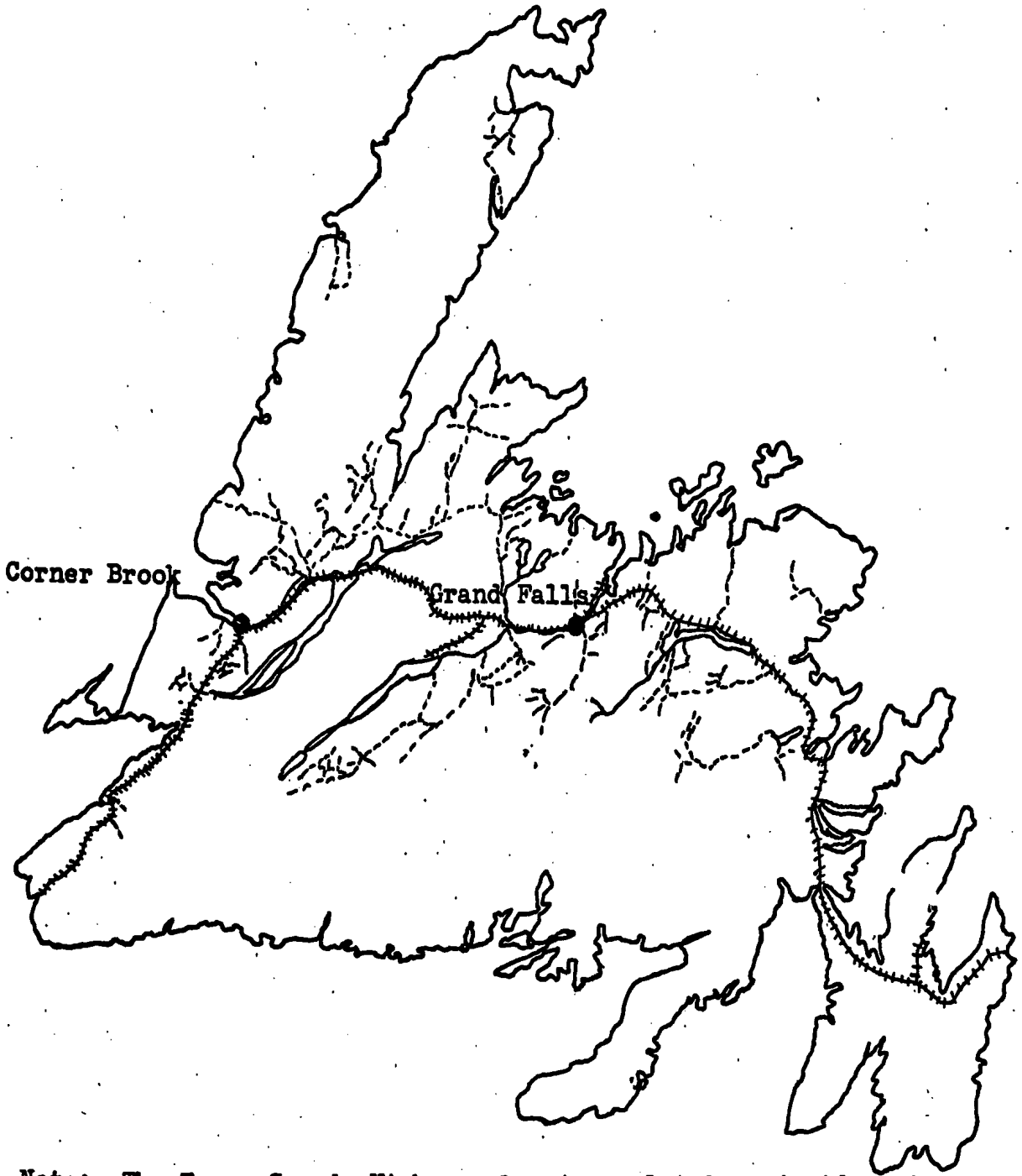
Logging Camps and the Introduction of Commuting

The traditional base from which logging operations have been carried out has been the logging camp. The Logging Camps Act, 1960 defines a logging camp as:

FIGURE 14

ROUTES USED FOR THE TRANSPORTATION

OF PULPWOOD IN NEWFOUNDLAND



Note: The Trans-Canada Highway almost completely coincides with the railway, and is therefore not shown separately. The dotted lines show road transportation. Those south of the railway are private woods roads, while those north of it include sections of the Trans-Canada Highway and other public highroads.

> A structure of any kind which a logger occupies or uses while he is working as a logger or in which loggers are provided with sleeping accommodations or meals or both, other than (i) a restaurant, hotel or boarding house which is licensed or subject to inspection under any other statute, or (ii) a private residence, and includes the land surrounding and the buildings, structures or installations adjacent to a logging camp.[14]

Logging camps may be of different sizes, depending largely upon the amount of wood that can economically be cut in its vicinity. A "standard" camp is one owned by the company and having a capacity for seventy men. However, two camps of the A.N.D. Company have capacities for one hundred forty men each. For purposes of licensing and regulation, a "small logging camp" is defined as:

> A logging camp where the number of loggers accommodated is fifteen or less and the annual logging quota does not exceed 1500 cords.[15]

Small logging camps are owned and operated by independent jobbers. When a company-owned camp of standard size is operated by a person other than a company foreman it may also be called a "jobber's" camp.

During 1963 the A.N.D. Company licensed twenty-seven standard camps and had three jobber camps in operation. In the same year Bowater's licensed fifteen standard camps, and had twenty-six jobber camps in operation.

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[14] Statutes of Newfoundland, 1960, "An Act to Amend and Consolidate the Law Respecting the Establishment and Operation of Logging Camps", May 30, Act No. 21, paragraph 2.(g), p. 84.

[15] Department of Mines, Agriculture and Resources, "The Small Logging Camp Regulations, 1961".

Of the fifteen camps licensed by Bowater's, however, only the three in Labrador carried out cutting operations. The others were used during the driving and haul-off periods. The jobber camps used to produce wood for Bowater's generally fall under the Small Logging Camp Regulations. There were approximately sixty jobber camps licensed in Newfoundland in 1963. In addition there were many other small unlicensed camps in operation, which were generally two to four man units cutting up to four hundred cords each. Although they did not reach the standards set by the regulations, these small camps were allowed to operate because they sometimes offered the only form of employment for the local workers. These small camps presented a particular problem to the authorities.[16]

Prior to 1960 the majority of logging camps in Newfoundland were of the fixed type. These were constructed from local materials, the oldest being built of logs. The Annual Report of Logging Camp Inspection, 1961 stated that:

> There are quite a number of the old fashioned log studded camps in use but in nearly every case another season, or at the most, two seasons, will see the end of their existence.[17]

Living conditions in camps were not uniform: contractors'

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[16] D.M.A.R., "Logging Camp Inspection Report for 1963", and "Inter-departmental Report on Jobbers' Logging Operations in 1963".

[17] D.M.A.R., "Annual Report of Logging Camp Inspection, 1961", p. 2.

camps were notably inferior to those operated by the companies, and the older camps especially left much to be desired.

By 1960 the A.N.D. Company had replaced many of its fixed camps by new portable "panel" camps. These new camps could be taken apart and re-erected in a new locality. At that date Bowater's had also begun to use the new camp. Living conditions in the panel camps were much better than in the fixed camps. Only a minority of the loggers, however, were living in the new camps, and pressure was being exerted by the loggers' union for the acceleration and extension of the program of camp improvement. Since most of their camps were outdated, Bowater's was faced with the prospect of having to buy new camps for almost all its wood operations. This would have involved a large expenditure of money since each camp would have cost up to $25,000. Besides, the pressure for camp improvement would not have ceased though new camps had been installed. The cost of operating camps was expected to continue to rise.

Faced with such a situation, Bowater's examined the possibility of using commuter operations in the woods. There were indications that it would be possible to procure in this manner most, if not all, of the company's wood requirements. Commuting in various forms was already in existence, as some of the west coast jobbers were operating on this basis, and many of the loggers living in camps were travelling to their homes two and three times per week. Quite often there were sufficient cars parked near a camp to

carry the entire camp crew. In addition, the system of public highways and private woods roads were reasonably adequate.

The Dunfield Commission commented on the possibility of the use of commuter operations as follows:

> It is the dream of the Woods Manager that someday he may be able to get most of his operations organized in that way. If, with the expansion of road systems, he could abolish regular camps and substitute company buses, he would be delighted, and would save on the cost of wood, for camps are expensive. And socially it would be very desirable; the men would live in their home environment and suffer no family separations.[18]

At this time, Bowater's envisaged low cuts for the years 1962 and 1963 because of plans to reduce mill inventories and to work towards year-round daily deliveries of fresh wood to the mills. This presented the opportunity to try commuting on a full scale with a minimum of disruption to the labour force.

The A.N.D. Company was afforded the opportunity to use commuting by opening a new cutting area close to centres of population. They also saw the opportunity to close one or more camps from which men were already going to their homes almost every other night.

In 1961 the paper companies introduced the policy of having the wood in certain areas cut by loggers commuting daily from nearby towns. By 1962 Bowater's had closed down all but four of their logging camps formerly engaged

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[18] Report of the Commission of Enquiry on the Logging Industry, 1960, p. 45.

TABLE 14

VOLUME AND PERCENTAGE OF PULPWOOD CUT IN NEWFOUNDLAND, BY SYSTEM AND COMPANY, 1962 AND 1963

		Camps		Jobbers		Commuters		Total	
		Cut in cords	Per cent	Cut in cords	Per cent	Cut in cords	Per cent	Cut in cords	Per cent
1962	Bowater's	9,000	3.1	33,398	11.6	245,324	85.3	287,722	100.0
	A.N.D. Co.	204,303	77.4	3,674	1.4	55,859	21.2	263,836	100.0
	Total	213,303	38.7	37,072	6.7	301,183	54.6	551,558	100.0
1963	Bowater's	19,808	5.6	14,119	3.9	323,731	90.6	357,658	100.0
	A.N.D. Co.	239,458	71.2	6,138	1.8	90,586	26.9	336,182	100.0
	Total	259,266	37.4	20,257	2.9	414,317	59.7	693,840	100.0

Source: Annual Report of the Department of Mines, Agriculture and Resources, for the year ending 31st. March, 1963, and "Logging Camp Inspection Report" for 1963.

in cutting.[19] Table 14 shows that in 1962 commuters produced 85.3 per cent of Bowater's cut and 21.2 per cent of the A.N.D. Company's cut. By 1963 the percentages of wood produced by commuters had risen to 90.6 and 26.9 respectively. In addition, production rose from 551,558 cords to 693,840 cords. Thus the increase in production was largely taken care of by expanded commuter activity. Table 15 shows that in 1962 commuters comprised 85.8 per cent and 20.4 per cent of the logging forces of Bowater's and the A.N.D. Company respectively. No figures are available for the number of commuters in 1963. Commuting loggers work in all phases of pulpwood production; some camps, however, are used only by workers engaged on the river drives.

TABLE 15

NUMBER OF LOGGERS EMPLOYED IN NEWFOUNDLAND BY THE TWO PAPER COMPANIES, CLASSIFIED BY SYSTEM OF WORKING, 1962

System	Bowater's	A.N.D. Co.	Total
In camps	100	2,068	2,168
With jobbers	675	22	697
As commuters	4,686	536	5,222
Total	5,461	2,626	8,087
Per cent commuters	85.8	20.4	64.6

Source: Annual Report of the Department of Mines, Agriculture and Resources for the year ended 31st. March, 1963, pp. 37-38.

[19] Annual Report of the Department of Mines, Agriculture and Resources for the year ended 31st. March, 1963, p. 38.

Present Conditions in Company Camps

As indicated above, logging camps in Newfoundland are inspected and licensed by the Provincial Government. The minimum requirements of the Logging Camps Act, 1960, and regulations made thereunder must be met before licenses are issued. Periodic inspections ensure that these standards are maintained. In the case of company camps conditions are usually well above the minimum requirements.

Camp conditions are relatively uniform throughout the A.N.D. Company's operations. All camps are of the portable

Figure 15

(A.N.D. Photo)

A modern woods camp.

panel type. The buildings are aluminum painted on the outsides, while the interiors are painted light green on the walls and white above the eaves. The floors of the bunkhouses are also painted, but the cookhouse floors are generally covered with a linoleum canvas. Buildings are raised well off the ground.

Figure 16

(A.N.D. Photo)

A modern woods camp
(Note T.V. antenna on bunkhouse, board walkway, and well-cleared site.)

All camps are at present provided with electricity from diesel or gasoline generating sets. This amenity is particularly advantageous in the cookhouse. Most camps now

have refrigerators or deep-freezes, while electric washing machines are used by the cookhouse staff. Radios are found in all camps, and only a few camps, where reception is inadequate, are without television. Camps are well illuminated both naturally and artifically.

All camps now have hot and cold running water which is provided by gravity flow or electric pump. In some camps the supply of hot water in the wash rooms is somewhat limited, but there is always plenty available from the large kettles on the cooking stoves. A few of the latest camps have urinals and showers in the wash rooms. Attempts at installing flush toilets have so far been unsatisfactory because, as in the case of the urinals, the facilities have been misused by some of the men. Toilet facilities therefore still remain in the usual outhouses, which are, however, strictly controlled by regulation.

Heat is provided in the cookhouses by large commercial oil ranges. Bunkhouses are usually heated by oil-burning space heaters, but two or three of the latest camps are centrally heated by thermostatically controlled hot air furnaces.

The bunkhouses are divided into cubicles, each containing two double bunks as shown in Figure 18. Sufficient chairs have to be provided to accommodate approximately half the men. Mattresses and mattress covers are provided, but the men supply their own blankets or sleeping bags.

Figure 17

(A.N.D. Photo)

Part of the wash room of one of the latest camps

Figure 18

(A.N.D. Photo)

A section of a bunkhouse

The A.N.D. Company serves food in accordance with a prescribed dietary scale.[20] Serving is done cafeteria style. The old fashioned long benches are no longer to be found in the cookhouses: they have been replaced by metal chairs as seen in Figure 19. Garbage is deposited in a container by removing a tightly fitting cover in the counter top near the stainless steel sink.

In 1964 Bowater's operated only two camps in the island of Newfoundland, one in the Glenwood area and the other at Taylor's Brook in the Hampden area. In the latter camp pans were being used in the washrooms, as sinks had not been installed. The tables in the cookhouse were of wood, having plywood tops painted yellow. Long benches were used instead of chairs. Serving was done in the old style of having the cookhouse staff act as waiters. Television could not be received in this area. Other than these differences, the descriptions given above for A.N.D. Company camps generally apply to the Bowater's camp at Taylor's Brook.

Living conditions in logging camps appear to the outside observer to be most satsifactory. Many of the loggers' homes do not have the amenities that already exist in the camps. Isolation is no longer a feature of camp life

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[20] Report of the Commission of Enquiry on the Logging Industry, 1960, Appendix X, Exhibit 6.

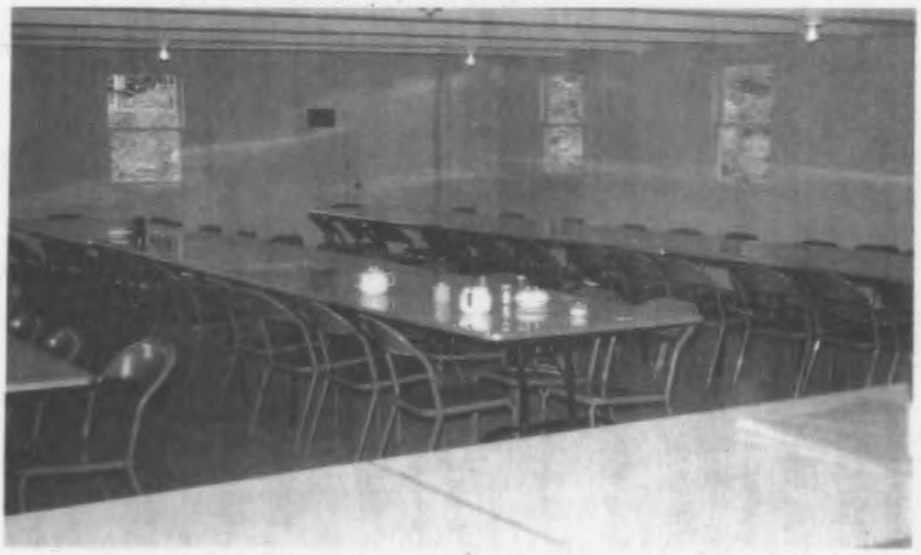

Figure 19

(A.N.D. Photo)

Dining Area

Figure 20

(A.N.D. Photo)

Cooking Area

since all camps are linked by fair roads to the highways. It is to be expected that complaints will sometimes arise, but the evidence indicates that these will be minimized by the policy of continued improvement of camps.

Commuting Conditions

It is particularly dangerous to generalize about the conditions under which commuting loggers work because conditions vary greatly from area to area.

Commuting has taken place over distances up to sixty-five miles, while some loggers have had to travel only one or two miles. Only some roads are paved, and driving conditions naturally vary from excellent to extremely poor. Many types of vehicles have been used, from open wood trucks to the latest cars and buses. Some loggers have commuted by boat and on foot, at least for part of the distance to the job site. Thus, while commuting may be economically and socially desirable under certain circumstances, a different combination of circumstances may make it very undesirable. This subject, however, is more adequately covered in Chapters V and VI.

CHAPTER IV

THE WOODS LABOUR FORCE

Chapter II gave some indication of the many different operations involved in the production of pulpwood. It is neither possible nor necessary in this essay to describe every detail of this complex industry. Different systems of cutting, hauling, and transportation require different types of machinery and men with varied skills. With mechanization men will become more skilled and more specialized. The pulpwood industry employs men of different trades, from cutters to cooks, from barn tenders to bus drivers. The wage rate schedules of the Woods Labour Agreement show that there are over seventy different classifications of occupations. Many of the men employed are already skilled or semi-skilled workers.[1]

It is difficult to establish an accurate estimate of the number of persons in Newfoundland at any given time who derive the major part of their incomes from the pulpwood industry. Normally this should be the number of persons

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[1] In Newfoundland, loggers are popularly considered to be unskilled labourers. In the writer's opinion, it is misleading to consider a good cutter an unskilled worker.

TABLE 16

NUMBER OF PERSONS EMPLOYED IN LOGGING AND NUMBER OF LOGGERS REGISTERED AS UNEMPLOYED, IN NEWFOUNDLAND, SEPTEMBER 1963 TO APRIL 1964

Date	Registered as unemployed	Employed in logging	Total
	(1)	(2)	(3)
1963, September	373	4,788	5,161
October	435	5,208	5,643
November	1,225	4,803	6,028
December	3,253	3,790	7,043
1964, January	4,114	3,565	7,679
February	4,120	3,764	7,884
March	4,348	2,967	7,315
April	4,355	2,727	7,082

Source: Column (1) from the National Employment Office, Unemployment Insurance Commission, St. John's; Column (2) from Table 6 of Appendix A.

employed in logging plus the number of loggers registered as unemployed. However, Table 16 shows that these totals at various dates vary considerably. The totals for September and October of 1963, for example, are lower by over two thousand than that for February 1964. Since autumn is generally a period of high employment, most of these men were working in industries other than logging, yet they registered as loggers upon termination of their employment. Also, there were unemployed loggers who were not registered with the Unemployment Insurance Commission because they lacked sufficient stamps to qualify for benefits. The most important factor, however, is the large seasonal fluctuations in employment opportunities, which induce considerable movements of the labour force among the different industries.

According to Table 8 there were 6,891 workers in the logging industry in Newfoundland in 1961. However, classification by occupation reveals that there were 7,065 loggers at that date; 5,356 in the labour force, and 1,709 not in the labour force.[2] Over the period January 1959 to April 1964 the number of persons employed in logging during any one month ranged from 1,242 in April 1963 to 9,322 in October 1961.[3] The monthly average for 1959-1963

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[2]D.B.S., Census of Canada, 1961, Vol. III, Parts 1 and 3, Tables 17 and 44. Persons considered to be not in the labour force are those 15 years of age or over, with a job during the past year, classified by occupation in which last employed, who answered "No" to the questions "Did you work last week?" and "Did you look for work last week?".

[3]See Table 6 of Appendix A.

was 4,278. In the light of the above data, however, it seems that there are about 7,000 loggers in this province.

Labour Unions

The first woods labour union, known as the Newfoundland Lumbermen's Union, was formed in April 1936, with headquarters at Grand Falls. By 1938 there were three other unions in the field - the Newfoundland Labourers' Association at Corner Brook, the Workers' Central Protective Union at Deer Lake, and the Fishermen's Protective Union at Port Union.[4] These unions did not work co-operatively until the Woods Labour Board was formed in 1940.

This Board, which consisted of the four unions, the two companies, and an independent chairman, developed a rather remarkable record of voluntary collective bargaining. It was described as "one of the most remarkable examples to be found anywhere in the western world of co-operation between labour and management".[5] Under the Board the loggers were said to have been one hundred per cent organized.[6]

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[4]The presence of the Fishermen's Protective Union is explained by the fact that in past years, more so than in recent years, many men worked in both fishing and logging.

[5]Cited by R. Gushue, Chairman of the Board, in "The Newfoundland Woods Labour Board," an address delivered to the St. John's Rotary Club, May 19, 1955, p. 8.

[6]Report of the Newfoundland Royal Commission on Forestry, 1955, p. 52.

From the workers' point of view, however, it is questionable if the effectiveness of the bargaining under this Board was as great as the degree of co-operation exhibited (see p. 96).

In 1956 the International Woodworkers of America (I.W.A.) sent an organizing team to Newfoundland, and on May 1, 1958, became the legal bargaining agent for loggers employed by the A.N.D. Company. They did not receive certification as the bargaining agent for loggers employed by Bowater's or by their independent contractors. The refusal of the A.N.D. Company to yield to the demands of this union for increased wages and improved working conditions led to a legal strike in January 1959. Subsequent illegal actions on the part of the union led to their decertification by an act of the Provincial Legislature in March 1959.

Thereafter, encouraged by the Provincial Government, steps were immediately taken to form a new loggers' union, the Newfoundland Brotherhood of Woods Workers (N.B.W.W.). Soon after its formation the N.B.W.W. signed an agreement with the A.N.D. Company.

The N.B.W.W. was dissolved in 1961 on affiliating with the United Brotherhood of Carpenters and Joiners of America. Local 2564 of this union is now voluntarily recognized by the two paper companies as the bargaining agent for the loggers in this province. After conciliation, a two-year agreement was reached on August 25, 1964 between the union and the employers, consisting of Bowater's

Newfoundland Pulp and Paper Mills, Limited, Anglo-Newfoundland Development Company, Limited, and The Newfoundland Contractors' Association.

Not all loggers, however, are members of Local 2564 of the United Brotherhood of Carpenters and Joiners of America. Union membership as of March 1963 was 4,597, which means that there were about 2,500 persons who were not members but who were working or likely to seek work in the woods. Union membership was not a condition of employment under the Labour Agreement of 1962-1964.[7] However, the present agreement, which expires April 30, 1966, states that "all employees shall become members of the Union within seven (7) days from the date they begin work covered by this Agreement, as a condition of continued employment."[8] The employers are required to collect working dues from all employees working on jobs covered by the Labour Agreement.[9] Thus the loggers are working under a "union shop" arrangement,

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[7] See Article V of the 1962-1964 Agreement.

[8] Article V, Section 5:02.

[9] This is known as the "Modified Rand Formula", after Mr. Justice Rand, who used this type of approach in 1946 in an arbitration case involving the Ford Motor Company of Canada, Ltd. Further discussion of this type of clause is found in H.J. Clawson, "Union Security Clauses and the Right to Work", The Canadian Bar Review, Vol. 30, (February, 1952), pp. 137-163, and in H.D. Woods and Sylvia Ostrey, Labour Policy and Labour Economics in Canada (Macmillan of Canada, Toronto, 1962).

for although they do not have to be members of the Union in order to obtain employment, they must become members if they wish to remain employed.

Population Distribution

The geographical distribution of the places of residence of the 4,597 loggers mentioned above is shown in Table 17 and in Figure 21.

TABLE 17

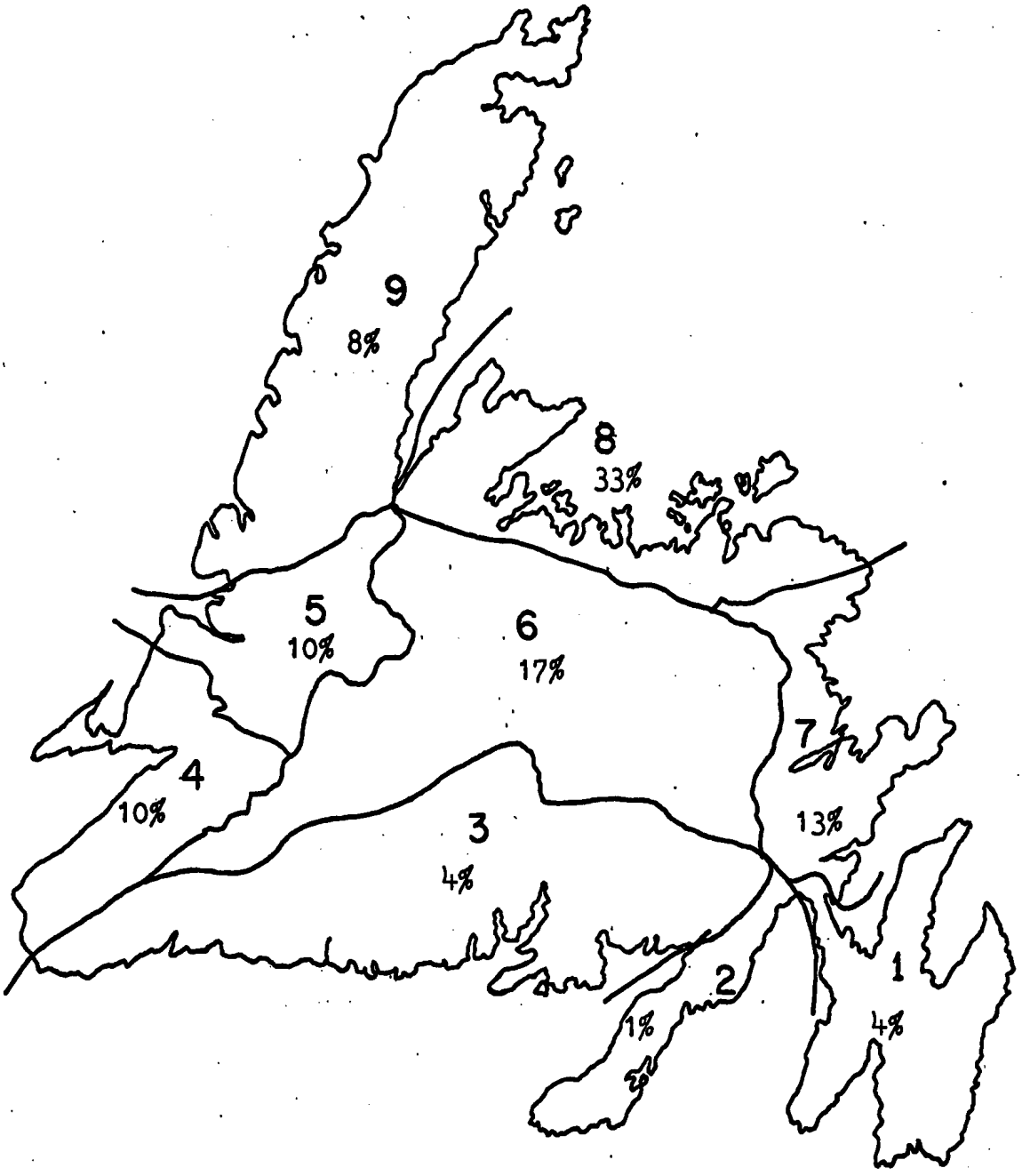
DISTRIBUTION OF LOGGERS IN NEWFOUNDLAND, BY CENSUS DIVISIONS, 1963

Census Divisions	Number	Per cent
1	176	3.8
2	53	1.1
3	201	4.4
4	461	10.0
5	470	10.2
6	785	17.1
7	613	13.3
8	1,495	32.5
9	343	7.5
Total	4,597	100.0

Source: Appendix B.

FIGURE 21

PERCENTAGES OF THE LABOUR FORCE RESIDING IN THE CENSUS DIVISIONS IN NEWFOUNDLAND, 1963



The loggers employed by the A.N.D. Company in 1963 came from the various areas as shown in Table 18.

TABLE 18

ORIGIN OF LOGGERS BY MAJOR COASTAL AREA, FOR THE A.N.D. CO., LTD., 1963

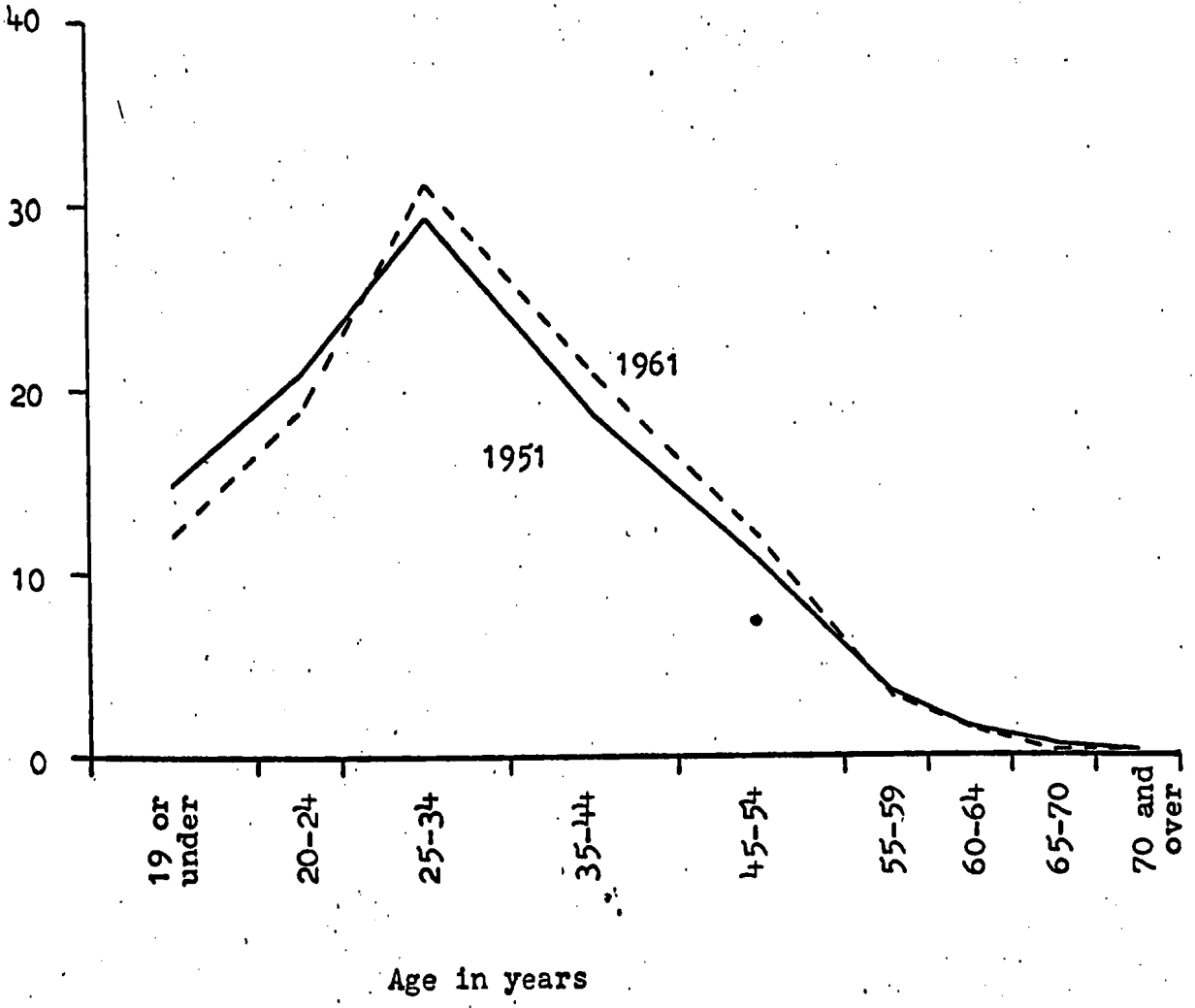
Coastal Area	Number	Per cent
Notre Dame Bay	1,879	63.59
Trinity Bay	256	8.66
Bonavista Bay	518	17.53
Placentia Bay	111	3.76
Conception Bay	7	0.24
Fortune Bay & Hermitage Bay	136	4.60
St. Mary's Bay	7	0.24
Cape Pine to Cape St. Francis	1	0.03
West Coast	29	0.98
White Bay	11	0.37
Total	2,955	100.00

Source: A.N.D. Co., Ltd., Woods Labour, 1963 and a Comparison with 1961 & 1962, p. 6.

Bowater's normally requires over fifty per cent more loggers than does the A.N.D. Company because their pulpwood production is usually about fifty per cent larger while their production per man day is slightly lower. The

FIGURE 22

PERCENTAGE DISTRIBUTIONS OF LOGGERS IN NEWFOUNDLAND, BY AGE GROUPS, 1951 AND 1961



Source: Table 29.

Corner Brook mill consumes approximately 1,600 to 1,700 cords of wood per day, while the Grand Falls mill consumes 1,100 to 1,200 cords per day. In addition, Bowater's are required to export annually not less than 50,000 cords.[10] In the areas from which the A.N.D. Company drew its loggers there were sufficient union members to meet their requirements. Union members were to be hired before loggers who were not members.[11] This indicates that the men hired by the A.N.D. Company were union members. Thus there remained approximately only 1,700 members who could have worked with Bowater's. Bowater's normally hire from four to five thousand men per year, who come chiefly from areas 4, 5, and 9, with smaller numbers from areas 7 and 8. Areas 1, 2, and 3 contain only a small number of loggers, of whom only a few are employed by Bowater's. It, therefore, appears that many of the West Coast loggers were non-unionized.

Age Distribution

Table 19 and Figure 22 indicate that the average age of loggers in Newfoundland is tending to rise. Thus the arithmetic mean of the 1961 distribution in Figure 22 is to

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[10] Report of the Newfoundland Royal Commission on Forestry, 1955, p. 30.

[11] Article V, Section 5:05, of the 1962-1964 Agreement.

the right of that of the 1951 distribution. According to the Dominion Bureau of Statistics, the average age was thirty-two years in 1961.

TABLE 19

LOGGERS IN NEWFOUNDLAND BY AGE GROUPS, 1951 AND 1961

Age group	1951		1961	
	Number	Per cent	Number	Per cent
19 or under	1,305	14.9	641	12.0
20-24	1,835	20.9	1,000	18.7
25-34	2,593	29.5	1,671	31.2
35-44	1,641	18.7	1,129	21.1
45-54	909	10.4	634	11.9
55-59	296	3.4	184	3.4
60-64	136	1.5	83	1.5
65-69	52	0.6	11	0.2
70 and over	10	0.1	3	0.1
Total	8,777	100.0	5,356	100.0

Source: D.B.S., Census of Canada, 1951, Volume IV, Table 11; and 1961, Volume III, Part 1, Table 17.

The A.N.D. Company has been watching with keen interest the rise in the average age of its loggers from thirty years in 1958 to thirty-five years in 1963. Some

A.N.D. officials feel that mechanization is contributing to this rise. Logging has always been a very strenuous occupation, but some of the more exhausting features are being eliminated. As mentioned in Chapter II, the most important innovation was the power saw. Machines are also taking care of much of the handling of pulpwood. Thus it is felt that the working life expectancy of loggers is being extended.

The rise in the average age of about one year per year suggests that many of the same loggers are coming back each year and are merely one year older. This indicates a more stable labour force. Fewer young men are entering the industry and the older men are remaining longer. The expansion of employment opportunities in the other sectors of the economy may be instrumental in reducing the percentage of younger men seeking employment in logging. With the existing labour surplus in the pulpwood industry, very young and inexperienced men are also less likely to be hired than older and more experienced men. Under the terms of the present Woods Labour Agreement, priority is to be given to seniority, other things being equal.[12] This will tend to raise the average age.

Employment, Wage Rates, and Earnings

In Chapter II a brief description was given of the relative sizes of the annual incomes of persons employed

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[12] Article XII of the 1964-1966 Woods Labour Agreement.

in the various industries of this province. It was shown that those employed in forestry are near the bottom of the scale. It is important to examine this aspect in closer detail, and to compare the average earnings of loggers in Newfoundland with those of loggers in some other parts of Canada.

Table 20 and Figure 23 show that the average weekly wages and salaries in forestry in Newfoundland since 1957 have been higher than in either Quebec or New Brunswick. Between 1951 and 1957 earnings in Newfoundland were generally a little higher than in New Brunswick but a little lower than in Quebec. Newfoundland earnings are consistently below those of Ontario, and earnings in British Columbia are always higher than in any other province.

Theoretically, under perfect competition, wages equal the value of the product of the marginal worker. The labour market of the pulpwood industry is not perfectly competitive, but there is a relation between wages and the value of production per worker. When logging is done on a piecework basis, earnings depend upon the price per unit of production and the amount produced, both of which are related to the forest density, or yields per acre. Ontario forests yield approximately forty cords per acre, compared with fourteen cords per acre for Newfoundland.[13] British Columbia

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[13] Woods Negotiations, 1964, p. 23.

TABLE 20

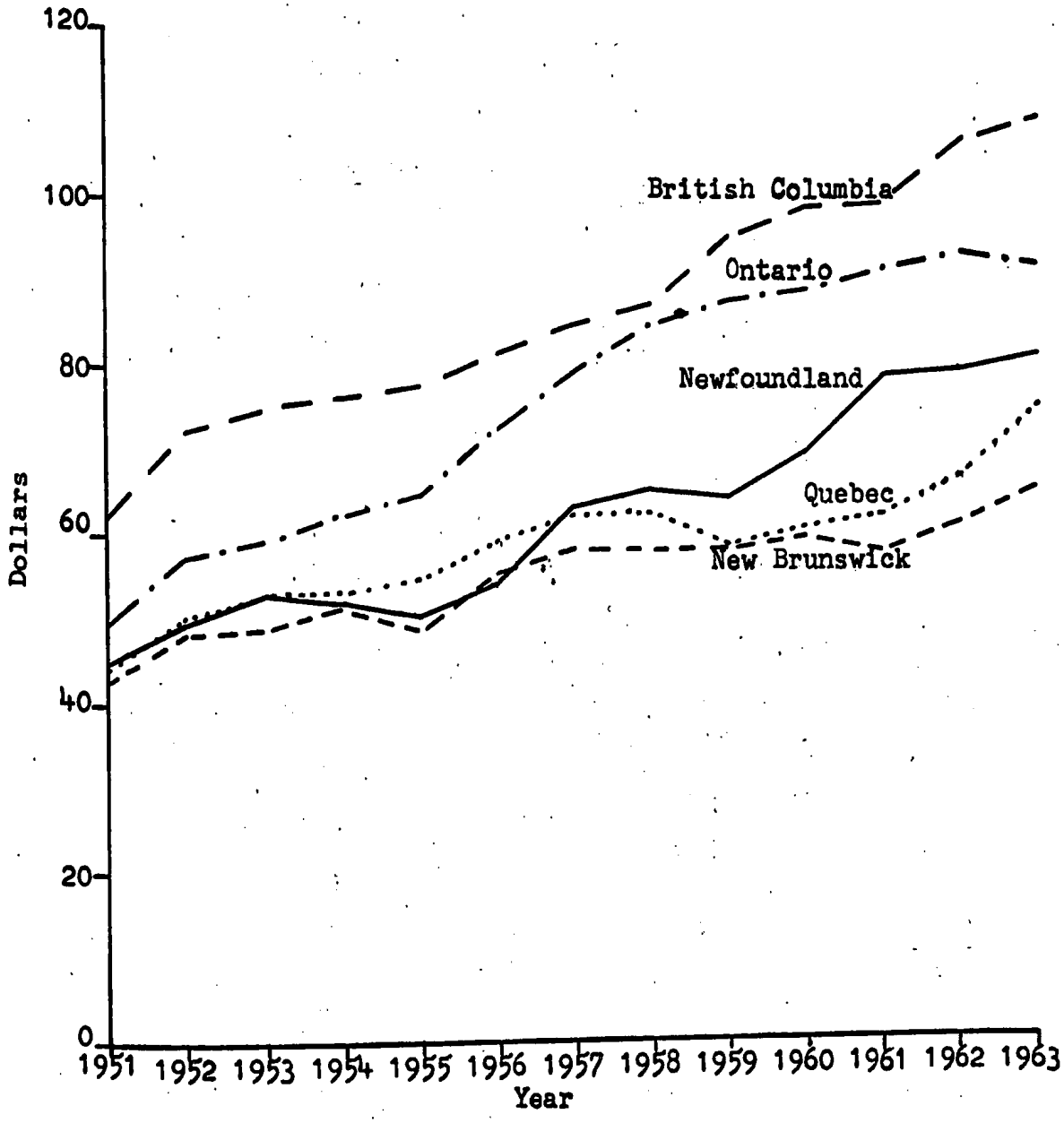
ANNUAL AVERAGE WEEKLY WAGES AND SALARIES IN FORESTRY AND IN PULP AND PAPER MILLS, FOR SELECTED PROVINCES, 1951 - 1963

Year	Newfoundland		New Brunswick		Quebec		Ontario		British Columbia	
	Forestry	Pulp and paper mills	Forestry	Pulp and paper mills	Forestry	Pulp and paper mills	Forestry	Pulp and paper mills	Forestry	Pulp and paper mills
1951	$44.74	$70.63	$40.56	$66.71	$44.32	$68.88	$49.54	$69.69	$62.22	$65.16
1952	49.45	76.53	48.05.	69.43	50.78	72.24	57.28	71.35	72.90	76.17
1953	53.24	77.73	48.61	70.53	53.11	75.16	59.30	74.57	75.10	79.13
1954	52.66	82.39	51.59	72.26	53.68	76.62	62.92	77.55	76.53	84.71
1955	50.88	84.34	48.72	75.90	55.14	78.82	65.27	81.40	77.86	87.51
1956	55.83	89.72	56.01	80.33	59.45	84.43	73.04	85.82	81.85	91.05
1957	63.20	103.26	58.36	81.71	62.93	87.87	79.58	89.57	85.44	92.64
1958	65.51	95.60	57.82	84.32	62.69	88.94	85.68	91.93	87.05	98.46
1959	64.25	101.54	57.86	89.89	58.45	93.06	87.53	94.68	95.89	101.73
1960	69.15	107.93	59.80	93.01	61.17	97.61	88.54	98.57	99.00	105.20
1961	78.76	113.73	57.66	95.72	62.80	102.29	91.81	102.61	99.43	107.75
1962	79.49	115.76	61.75	99.42	67.00	105.51	94.45	105.84	106.81	109.59
1963	81.63	118.00	66.33	102.12	75.88	109.33	92.43	108.25	109.41	113.91

Source: D.B.S., Review of Employment and Payrolls, 1958, Table 20, and 1962, Table 9; 1963 figures are calculated from Table 7 of Appendix A.

FIGURE 23

AVERAGE WEEKLY WAGES AND SALARIES IN FORESTRY FOR SELECTED PROVINCES, 1951 - 1963



Source: Table 20.

forests yield many more cords per acre than do forests in any other province. To this extent, therefore, higher earnings in Ontario and in British Columbia are economically justifiable.

The figures in Table 20 represent the average weekly earnings of all persons engaged in the primary sector of the forest industries. Of these the pulpwood cutters are the most important single group. In Newfoundland practically all pulpwood is cut on a piecework basis. Table 21 shows that the average straight-time earnings per day of piece-workers in Newfoundland was $16.52 in 1963, which was below the average of Eastern Canada. It must be emphasized, however, that the latter is considerably influenced by the high earnings in Ontario.

Loggers in Newfoundland work more hours per week than do loggers elsewhere in Eastern Canada: until 1961 loggers in this province worked sixty hours per week. Since 1962 and until April 30, 1966 the agreed standard work week is fifty-four hours. Union demands for an eight hour day were dropped during the negotiations of the 1964-1966 Woods Labour Agreement.

By dividing the average weekly earnings in Table 20 by the average number of hours worked per week (Table 21), the following earnings per hour are obtained:

Newfoundland	$1.51
New Brunswick	1.27
Quebec	1.45
Ontario	2.15

TABLE 21

STANDARD HOURS PER WEEK AND AVERAGE STRAIGHT TIME EARNINGS PER DAY OF PULPWOOD CUTTERS FOR PIECE OR INCENTIVE WORK (WITHOUT BOARD)[1], FOR SELECTED PROVINCES, 1959 - 1963 [2]

Year	Eastern Canada[3]	Newfoundland	New Brunswick	Quebec	Ontario
			(dollars)		
1959	14.81	15.01	13.12	13.23	20.79
1960	15.81	14.41	13.19	14.59	21.93
1961	16.50	15.81	14.22	15.01	22.52
1962	17.94	15.86	12.60	16.52	23.75
1963	18.65	16.52	14.84	17.45	24.49
			Standard hours per week		
1959	54.4	60.0	51.8	55.6	48.5
1960	52.5	60.0	48.3	52.9	48.3
1961	52.0	60.0	53.0	52.4	45.4
1962	50.3	54.1	50.1	52.4	45.5
1963	50.2	54.0	52.3	52.3	42.5

Notes: 1. Rates include board. When the latter is supplied the value of board is deducted from the employee's pay.

2. As of October 1 of each year.

3. Newfoundland, Nova Scotia, New Brunswick, Quebec, and Ontario.

Source: Canada Department of Labour, Economics and Research Branch, Wage Rates, Salaries and Hours of Work, 1959 - 1963, Table 1.

It appears from Table 21 that pulpwood cutters normally work nine hours per day in Newfoundland, New Brunswick, and Quebec, but eight hours per day in Ontario. Thus cutters' earnings per hour were:

Newfoundland	$1.84
New Brunswick	1.65
Quebec	1.94
Ontario	3.06

Statistics obtained from the two paper companies generally support the above figures. Table 22 shows that the loggers employed by the A.N.D. Company averaged $16.18 per day in 1963. There was an increase in the average earnings per total man day over the three years. Cutters in 1963 averaged $17.47 per day, which was also higher than in either 1961 or 1962. Workers in the Deer Lake Division of Bowater's operations earned an average of $13.91 per

TABLE 22

AVERAGE EARNINGS PER MAN DAY OF LOGGERS EMPLOYED BY THE A.N.D. CO., LTD., 1961 - 1963

Type of work	1961	1962	1963
Cutters	$17.01	$16.81	$17.47
Other work	13.73	14.16	14.78
All work	15.29	15.35	16.18

Source: A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p. 3.

TABLE 23

PRODUCTION AND EARNINGS PER DAY OF PULPWOOD CUTTERS EMPLOYED BY THE A.N.D. CO., LTD., BY PRICE GROUP AND METHOD OF CUTTING, 1963

Price group in dollars per cord	Cords cut	Number of man days	Cords cut per man day	Average earnings per man day
		Cut and pile		
7.26 - 7.50	27,245.52	9,696	2.81	$20.85
7.51 - 7.75	33,736.98	12,779	2.64	20.03
7.76 - 8.00	72,542.52	31,404	2.31	18.19
8.01 - 8.25	15,265.17	7,201	2.12	17.30
8.26 - 8.50	40,506.88	19,954	2.03	17.04
8.51 - 8.75	11,560.67	5,279	2.19	18.89
Total or average	200,857.74	86,313	2.33	$18.46
		Cut and bunch		
6.51 - 6.75	5,405.75	1,884	2.87	$18.67
6.76 - 7.00	14,360.98	5,523	2.60	17.80
7.01 - 7.25	6,160.43	2,514	2.45	17.63
Total or average	25,927.16	9,921	2.61	$17.92

Source: A.N.D. Company, Woods Department.

day in 1963.[14]

Table 23 gives a more detailed breakdown of production and earnings of A.N.D. cutters for 1963. Cutters working on "cut and pile" operations averaged fifty-four cents per day more than those working on "cut and bunch" operations. Furthermore, despite the higher prices per cord paid for poorer stands of timber, earnings per man day declined as the price of wood increased. In effect, the decline in cords cut per man day was not offset by the increase in the price paid per cord, with the exception of the $8.51 - 8.75 price group. Production per man day here was higher than in the two preceding categories, thus indicating under-assessment of the quality of the timber to be cut.[15] Again, average earnings in Table 23 are a little higher than in Table 22. This may be due to differences in the number of man days involved as well as in the number of cords cut.

Average monthly earnings of A.N.D. loggers in 1963 was $425. This would amount to $5,100 in a year. However, the average annual income from the A.N.D. Company was only $1,231.75. The average period of employment was only 75.7 days, or 2.9 months. Comparable figures for 1962 and 1961 were $1,000.43 and $1,164.50, and 65.2 and 76.2 days

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[14]Supplied by the Deer Lake Office of Bowater's Newfoundland Pulp and Paper Mills, Limited.

[15]The price of wood to be cut is determined before the actual cutting takes place.

respectively.[16] In 1963 the average period of employment in the Deer Lake Division of Bowater's operations was 56.6 days, and the average annual income $787.[17] In short, annual incomes from logging in Newfoundland, despite wage rates that are not unattractive, are very low because of the brief period of employment.

The number of loggers employed by the A.N.D. Company for various periods during 1961, 1962, and 1963 is given in Table 24. The percentage distributions are plotted on Figure 24. It is evident that the men are concentrated in the lower categories. By combining the smaller categories the following distribution is obtained for 1963:

Worked 100 days or less - 67.0 per cent
Worked 101 to 200 days - 29.7 per cent
Worked 201 days and over- 3.3 per cent

Twenty-two per cent of these loggers worked twenty-five days or less; only ninety-eight men worked 201 days or over. Figure 24 indicates that in 1963 the concentration of loggers at the centre of the scale was greater than in the two previous years. This does not, however, indicate a trend towards longer periods of employment.

Comparable figures to the above are not available

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[16] A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p. 11.

[17] Calculated from data supplied by the Deer Lake Office of Bowater's Newfoundland Pulp and Paper Mills, Ltd.

TABLE 24

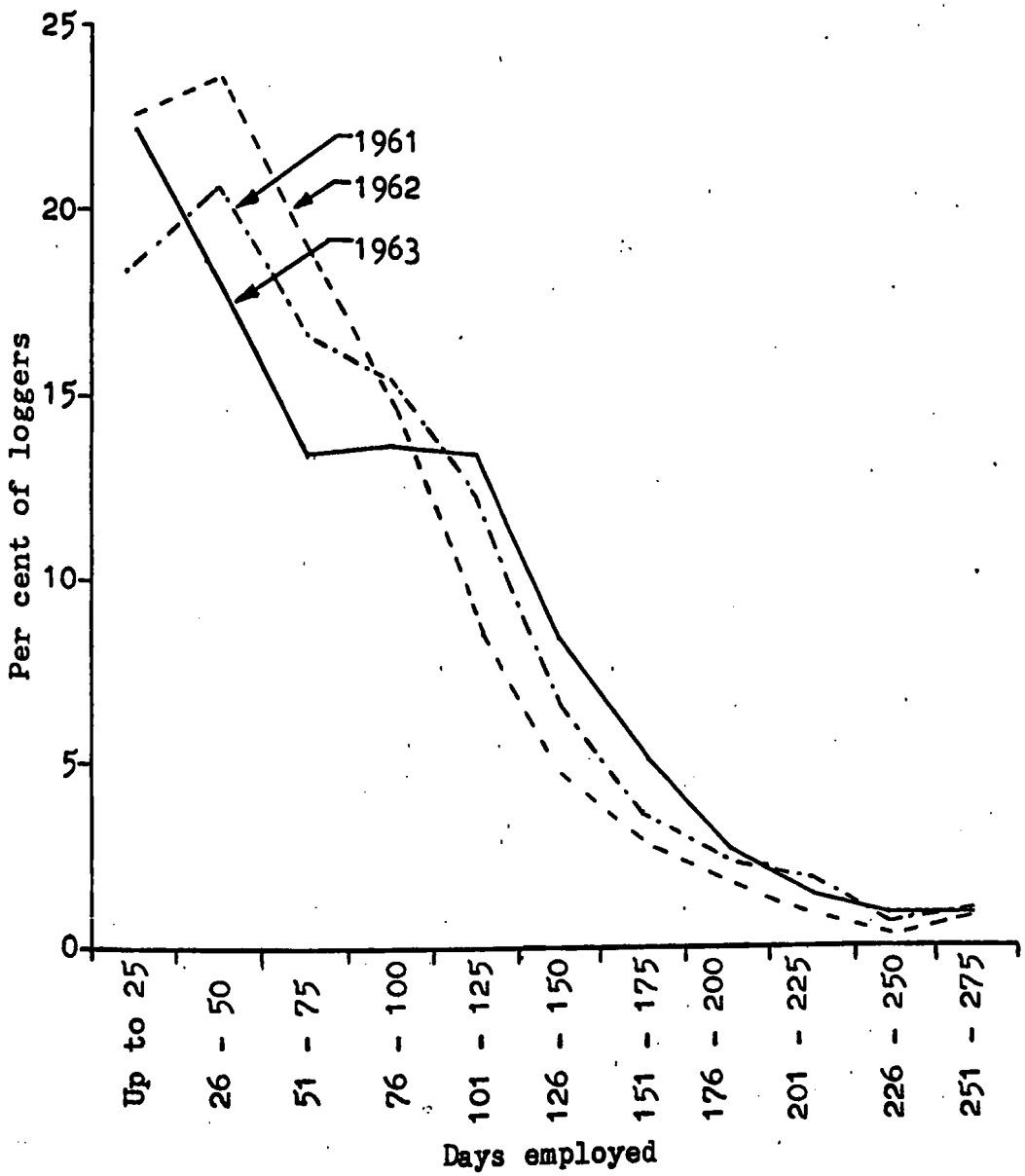
NUMBER OF MEN WHO WORKED VARIOUS PERIODS OF EMPLOYMENT WITH THE A.N.D. CO., LTD., 1961 - 1963

Number of days worked	1961		1962		1963	
	Number	Per cent of total	Number	Per cent of total	Number	Per cent of total
Up to 25	729	18.6	808	22.6	655	22.2
26 - 50	809	20.7	849	23.6	528	17.9
51 - 75	650	16.6	680	18.9	393	13.3
76 - 100	603	15.4	532	14.8	402	13.6
101 - 125	481	12.3	312	8.8	396	13.4
126 - 150	264	6.7	170	4.7	248	8.4
151 - 175	143	3.7	102	2.8	154	5.2
176 - 200	95	2.4	62	1.7	81	2.7
201 - 225	76	1.9	34	0.9	44	1.5
226 - 250	29	0.7	12	0.3	25	0.8
251 and over	39	1.0	29	0.9	29	1.0
Total	3,918	100.0	3,590	100.0	2,955	100.0

Source: A.N.D. Co., Ltd., Wood's Labour, 1963, and a Comparison with 1961 and 1962, p. 12.

FIGURE 24

PERCENTAGE DISTRIBUTIONS OF LOGGERS WORKING VARIOUS PERIODS OF EMPLOYMENT WITH THE A.N.D. CO.,LTD., 1961 - 1963



Source: Table 24.

for Bowater's. However, there seems to be no reason to suspect that they would differ significantly.

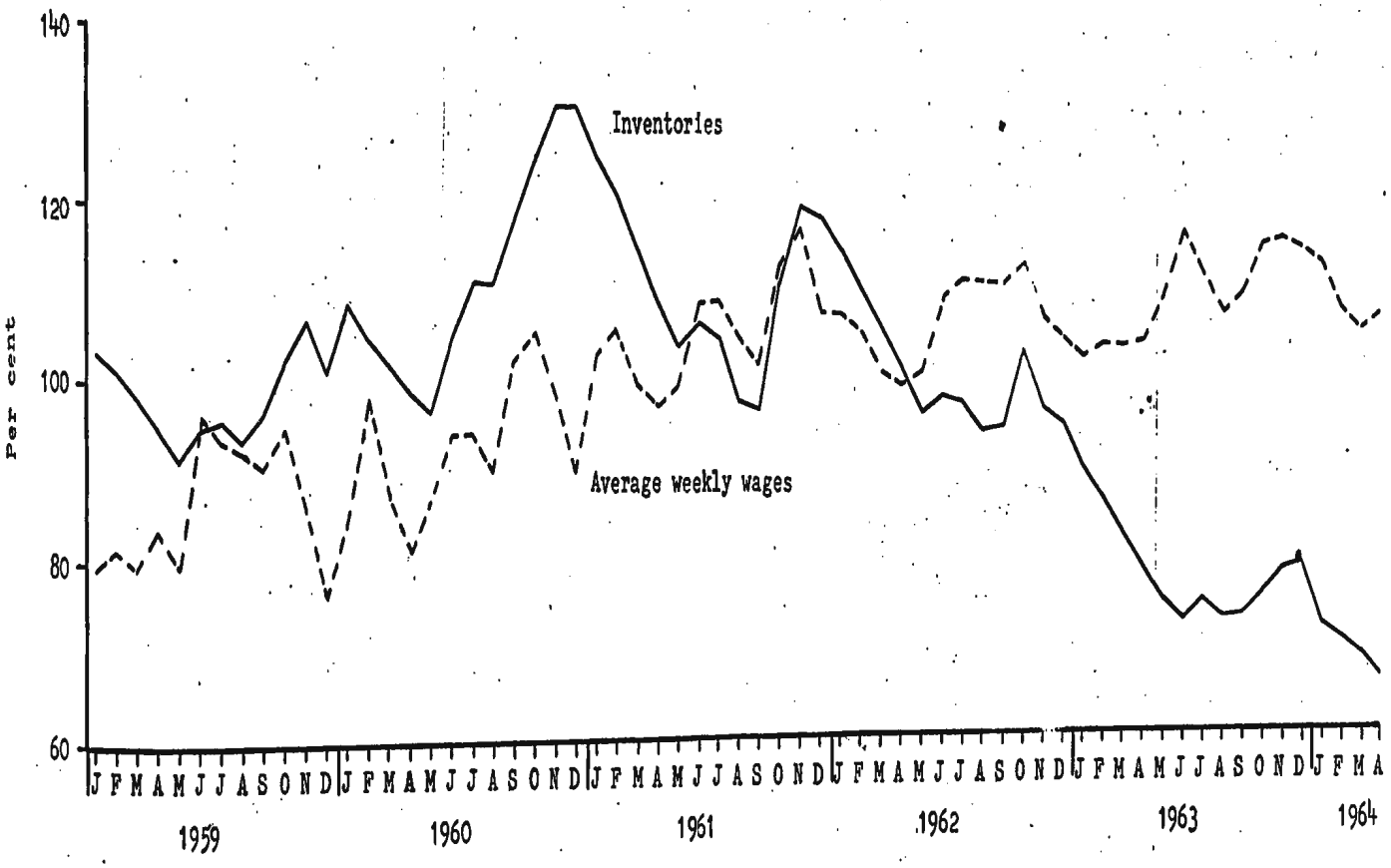
The indexes of production and employment as shown in Figure 25 depict similar patterns with strong and regular seasonal variations. This confirms the suggestion made on page 19 of Chapter II. The amplitudes of the fluctuations in employment, however, are less than in production, mainly because "production" refers to the volume of wood cut, while "employment" includes persons engaged in all phases of pulpwood harvesting. It follows that an index of the number of men employed in cutting should show fluctuations of equal magnitude to those in the production index.

Both curves have major seasonal peaks in the autumn (usually October), with minor seasonal peaks in early summer (usually June). The low points are in winter and spring (January-May), with secondary lows in August. These fluctuations are largely the result of climatic conditions. Cutting begins in early summer, but declines in August because of the high forest fire hazard and the inconveniences of flies and heat. The largest volume of wood is cut in the fall when the weather is cooler and the winter snows have not yet begun. Although the pulpwood industry is still not fully geared to winter operation, production over the winter of 1963-1964, despite the heavy snowfall, was higher than in any previous winter for the period covered.

Several irregular movements occurred between 1958 and 1964. Production was very low in January 1959 due to the

FIGURE 26

INDEXES OF PULPWOOD INVENTORIES AND AVERAGE WEEKLY WAGES IN NEWFOUNDLAND, JANUARY 1959 - APRIL 1964

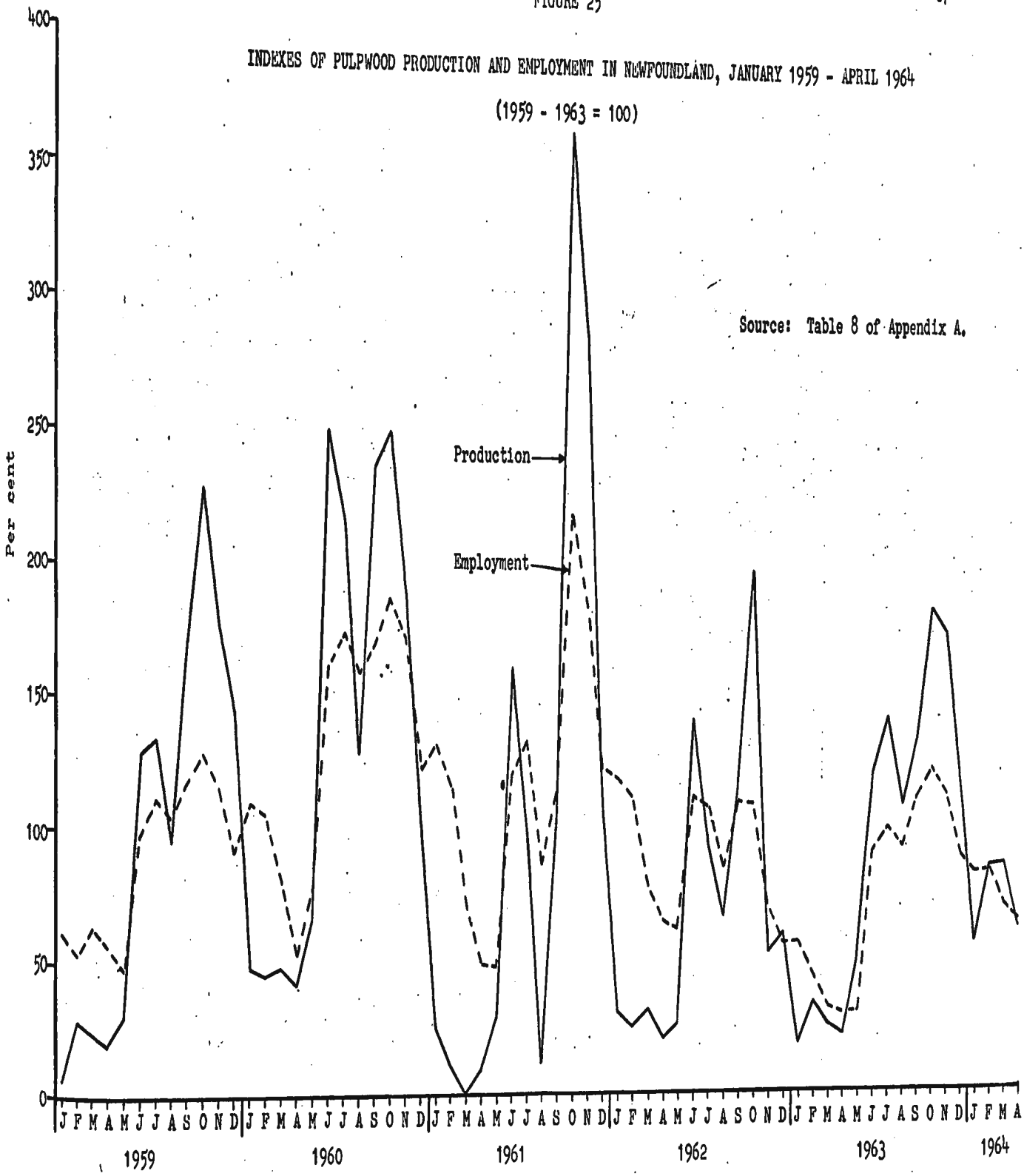


Source: Table 8 of Appendix A.

FIGURE 25

INDEXES OF PULPWOOD PRODUCTION AND EMPLOYMENT IN NEWFOUNDLAND, JANUARY 1959 - APRIL 1964

(1959 - 1963 = 100)



Source: Table 8 of Appendix A.

strike against the A.N.D. Company. The extreme low in August 1961 coincided with the large forest fires of that year, and was followed by extra high production in October and November.

The foregoing illustrates the very erratic nature of employment in the woods. There is a high labour turnover, with many loggers being hired two or more times per year. Actually, the average number of registrations per man with the A.N.D. Company were 1.9 in 1961, 1.8 in 1962, and 1.8 in 1963.[18] In addition, many men who work in the woods during June and July, for example, may be employed in some other industry when woods operations again expand in September and October. There is, therefore, a large number of migrating workers.

The index of inventories closely follows those of employment and production (see Figure 26). It shows the same seasonal pattern, but with a lag of a month or two. There are peaks in late autumn (usually November), troughs in late spring (usually May), and minor fluctuations in June through August. Inventories generally decline over the winter and through the spring. Since 1961 there has been a strong downward trend as a result of the policy of working towards year-round production, and the index has tended to coincide very closely to that of employment.

The average number of persons employed per month in each year declined from 5,600 in 1960 to 3,239 in 1963. The

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[18] A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p. 11.

average for 1959, however, was only 3,738 persons.[19] Meanwhile the volume of pulpwood produced was also a little lower in 1963 (see Table 5 of Appendix A). This indicates that the number of man days of work available in any year depends upon the planned production for that year. Assuming there is no effect upon production per man day, it makes no difference to the volume of employment whether wood is cut from camps or by commuters. However, when men are available the employers generally will hire as many as they can accommodate and supervise. Since 1961 it has been possible to use larger crews on each cutting operation because of commuting. Thus commuting tends to shorten the average term of employment. Mechanization, however, has the opposite effect, in that it decreases the number of men, increases output per man day, and facilitates year-round operation.

Over the years 1951 to 1963 the average weekly wages of loggers in Newfoundland were 13.4 per cent higher than in New Brunswick, 5.4 per cent higher than in Quebec, but 18.1 per cent lower than in Ontario, and 28.4 per cent lower than in British Columbia.[20] Comparisons of average weekly wages in pulp and paper manufacturing, however, reveal that Newfoundland workers have the highest earnings in Canada.

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[19] Calculated from Table 6 of Appendix A.

[20] Calculated from Table 20.

Over the years 1951 to 1963, average weekly earnings in Newfoundland exceeded those in other provinces by the following percentages:[21]

New Brunswick	14.4
Quebec	8.5
Ontario	7.4
British Columbia	2.0

In summary, mill workers in Newfoundland, unlike their colleagues elsewhere in Canada, have received greater benefits from the industry. On the other hand, loggers in this province have been at a disadvantage compared with loggers in the rest of Canada. Indications are, however, that the gap between the two groups in Newfoundland may be slowly narrowing. Average weekly wages in forestry have shown an upward trend since 1959 (see Figure 27). The gaps between mill wages and wages in forestry for selected provinces are illustrated on Figure 27. In Newfoundland, as in New Brunswick and Quebec, average weekly wages in the pulp and paper mills have been approximately fifty per cent higher than those in forestry. In Ontario, however, the difference has been about fifteen per cent, having declined rapidly over the years 1951 to 1958. In British Columbia mill wages were generally five to ten per cent higher than wages in forestry.

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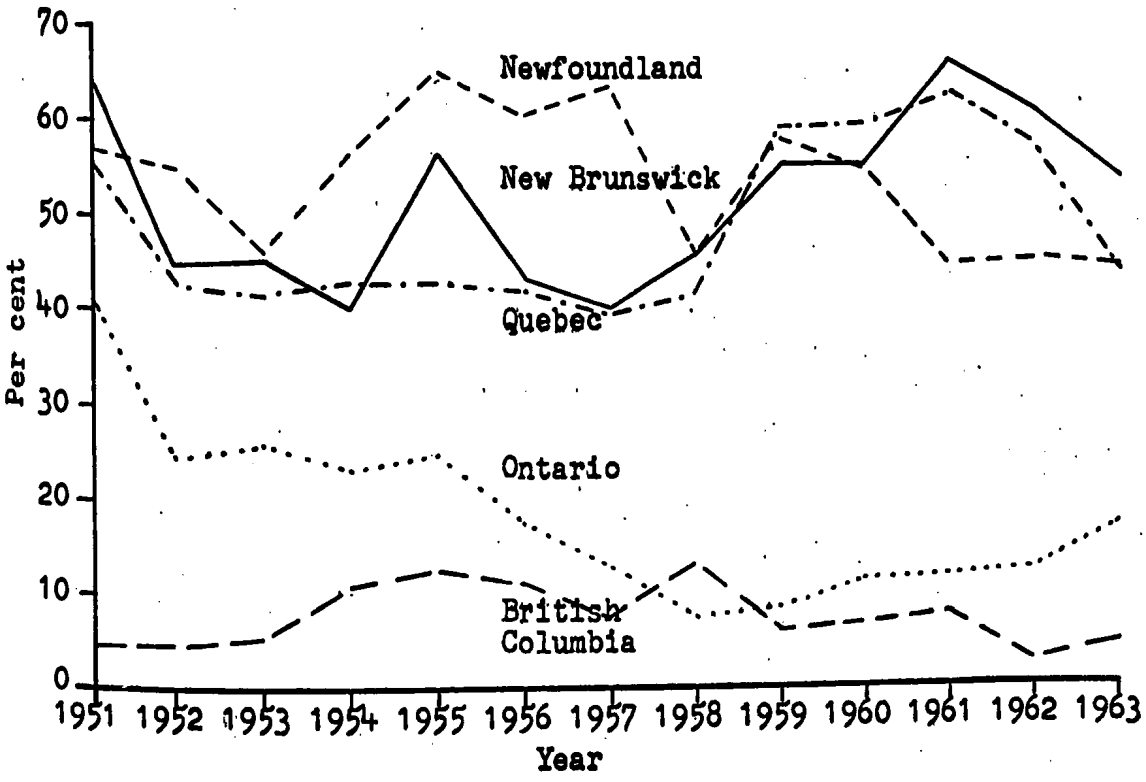
[21] Calculated from Table 20.

FIGURE 27

PERCENTAGES BY WHICH ANNUAL AVERAGE WEEKLY WAGES AND SALARIES IN PULP AND PAPER MILLS EXCEEDED THOSE IN FORESTRY, FOR SELECTED PROVINCES, 1951-1963



Source: Table 9 of Appendix A.

TABLE 25

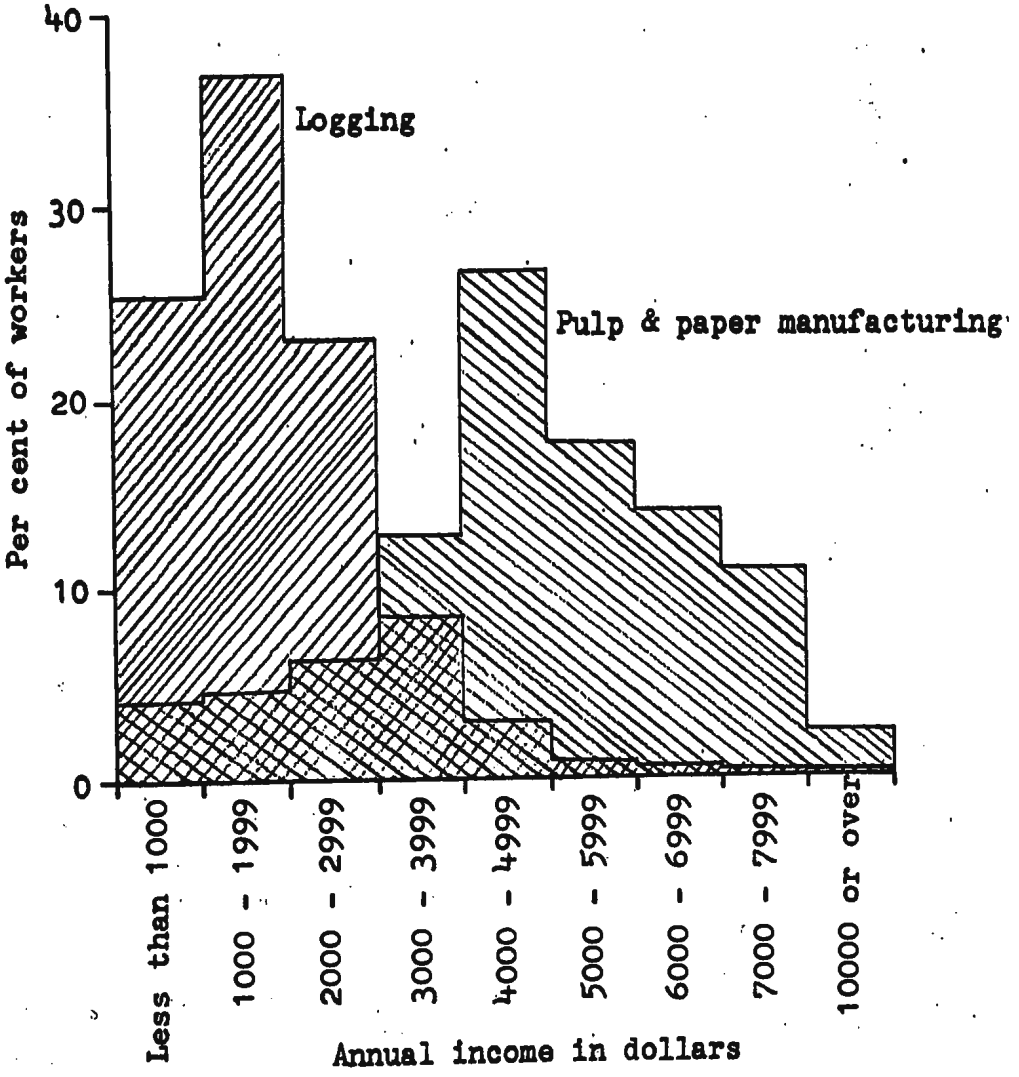
DISTRIBUTION OF MALE WAGE-EARNERS IN LOGGING AND IN THE PULP AND PAPER INDUSTRY, BY EARNINGS BRACKET, IN NEWFOUNDLAND, FOR THE CENSUS YEAR 1961

Amount of earnings in dollars	Logging		Pulp and paper industry	
	Number	Per cent	Number	Per cent
Less than 1000	1,612	25.7	134	4.1
1000 - 1999	2,337	37.2	159	4.8
2000 - 2999	1,456	23.2	205	6.2
3000 - 3999	542	8.6	422	12.8
4000 - 4999	188	3.0	887	26.8
5000 - 5999	59	0.9	589	17.8
6000 - 6999	35	0.6	465	14.1
7000 - 7999	36	0.6	363	11.0
10000 or over	16	0.3	84	2.5
Total	6,281	100.0	3,308	100.0

Source: D.B.S., Census of Canada, 1961, Vol. III, Part 3, Table 28.

FIGURE 28

PERCENTAGE DISTRIBUTIONS BY ANNUAL INCOME OF MALE WORKERS IN LOGGING AND IN PULP AND PAPER MANUFACTURING IN NEWFOUNDLAND FOR TWELVE MONTHS PRIOR TO JUNE 1ST., 1961.



Source: Table 25.

According to Table 25 and Figure 28 mill workers in Newfoundland, unlike loggers, are concentrated in the higher income brackets. Correspondingly they have longer average periods of employment (see Table 26).

TABLE 26

DISTRIBUTION OF MALE WAGE-EARNERS IN FORESTRY AND IN THE PULP AND PAPER INDUSTRY IN NEWFOUNDLAND, BY WEEKS OF EMPLOYMENT, FOR THE CENSUS YEAR 1961

Weeks of employment	Forestry		Pulp and paper industry	
	Number	Per cent	Number	Per cent
1-13	1,185	18.4	122	3.7
14-26	2,752	42.8	156	4.7
27-39	1,542	24.0	196	6.0
40-52	958	14.9	2,819	85.6
Total	6,437	100.0	3,293	100.0

Source: D.B.S., Census of Canada, 1961, Vol. III, Part 3, Table 30.

In addition to their higher weekly and annual earnings, mill workers have other advantages over loggers in Newfoundland. They enjoy such fringe benefits as pension plans, group insurances, and vacations with pay. Although the latter is provided in the 1964-1966 Woods Labour Agreement, few loggers

will qualify. Loggers' pensions would be almost impossible to administer, given the short terms of employment and the high mobility of labour. Also, loggers often do not receive sufficient employment to qualify for unemployment insurance benefits. As they are seldom considered good risks by finance companies and banks, they have difficulty in obtaining credit for installment buying.

According to Table 27, loggers in 1961 had the second lowest per capita income of any group of workers in this province. Their average family earnings was $2,000, and the average family size was 5.5 persons. Thus the per capita income was only $365, or one dollar per person per day.

Conclusion

Because the logging population in Newfoundland is scattered and mobile, it has therefore been extremely difficult to organize them effectively. It seems that their relatively poor economic position may have resulted largely from inadequate unionization and a consequent poor bargaining position as compared to other workers in the pulp and paper industry. Their bargaining position, however, was considerably strengthened by affiliation with large and financially strong international unions. But mill workers have had longer association with international unions, and therefore have been able to obtain rates and working conditions comparable to those elsewhere in North America. Because the loggers have generally been the weakest group, they have received

TABLE 27

FAMILIES WITH MALE HEADS, BY OCCUPATIONAL DIVISION OF HEAD, SHOWING FAMILY SIZE AND AVERAGE EARNINGS, FOR NEWFOUNDLAND, 1961

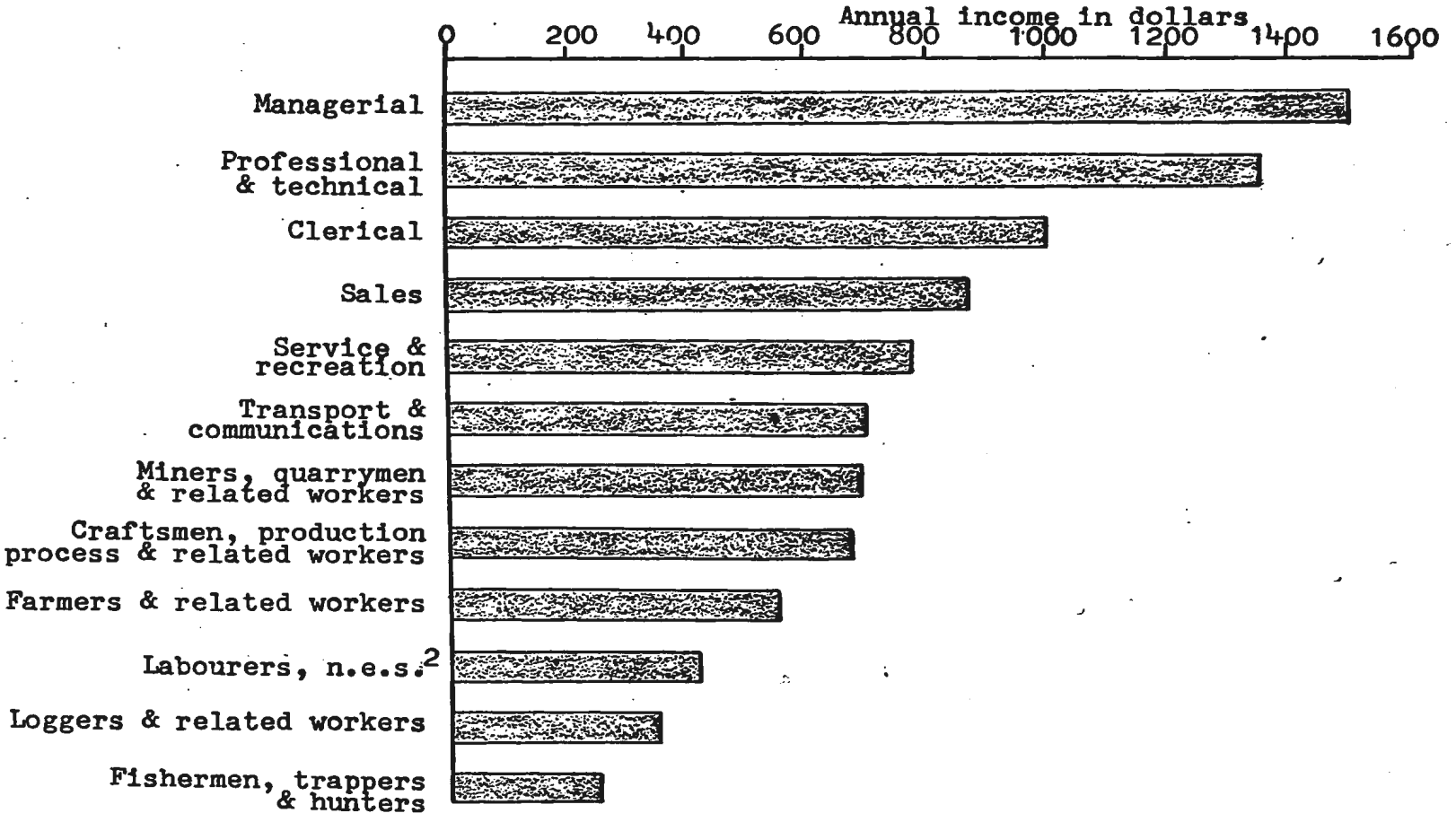
	Total	Persons in families		Average number of children per family	Wage-earner families			
		Total	Average per family		Total	Average earnings of head	Average family earnings	Per capita family income (Col.(7) ÷ Col.(3))
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
All occupations[1]	62,079	307,785	5.0	2.9	51,815	3,165	3,611	722
Managerial occupations	6,089	26,355	4.3	2.3	3,194	5,688	6,327	1,471
Professional and technical occupations	2,863	11,628	4.1	2.0	2,582	4,920	5,418	1,321
Clerical occupations	3,224	13,929	4.3	2.3	3,211	3,662	4,296	999
Sales occupations	2,129	9,236	4.3	2.3	2,002	3,359	3,866	899
Service and recreation occupations	4,372	20,790	4.8	2.7	4,263	3,195	3,693	769
Transport and communication occupations	6,425	31,637	4.9	2.9	5,825	3,036	3,398	693
Farmers and related workers	1,054	4,859	4.6	2.5	337	2,107	2,596	564
Loggers and related workers	3,749	20,596	5.5	3.5	3,589	1,780	2,008	365
Fishermen, trappers and hunters	5,423	28,338	5.2	3.2	1,194	1,292	1,567	301
Miners, quarrymen and related workers	1,682	9,859	5.9	3.8	1,679	3,726	4,079	691
Craftsmen, production process and related workers	19,134	99,696	5.2	3.2	18,147	3,101	3,560	685
Labourers, not elsewhere specified	4,839	25,799	5.3	3.3	4,816	1,874	2,258	426

Note: 1. Includes male heads not reporting occupation.

Source: D.B.S., Census of Canada, 1961, Vol. II, Part 1, Table 81.

FIGURE 29

PER CAPITA FAMILY INCOME BY OCCUPATION OF HEAD OF FAMILY IN NEWFOUNDLAND, 1961[1]



Note: 1. Ranked in descending order.
2. Not elsewhere specified.

Source: Table 27, Column (8).

the least. The share received by the individual logger has been relatively small because of the large number of loggers and the short period of time worked. Higher annual earnings may be obtained by increasing the productivity of the worker, which in turn may be accomplished by creating a smaller and more stable labour force. However, it may be more desirable for the present labour force to receive relatively low incomes than for a smaller number to receive higher incomes, with the remainder unemployed. The pulpwood industry in this province will obviously have to expand in order for the present number of loggers to receive longer periods of employment.

Thus the commuting policy is being introduced when the problem of surplus labour is acute because of lower pulpwood production and increased mechanization. There is increased competition for jobs, and employers are able to be more selective. Therefore the workers tend to be less demanding with regard to wages and working conditions, despite the presence of international unions. This situation has permitted the introduction of commuting with a minimum of protestation by employees.

CHAPTER V

A DETAILED ANALYSIS OF CAMPERS AND COMMUTERS

There is very little published information on the effects of commuting on the woods labour force. This gap was partially filled by mailing questionnaires to a ten per cent stratified systematic sample of the logging population. The results are analysed in this chapter. A copy of the questionnaire and a description of the techniques used are given in Appendix B.

Response by Census Divisions

Columns (1) and (2) of Table 28 show the distribution of the logging population by Census Divisions. This stratification was chosen on the assumption that it would correspond approximately to the distribution of loggers according to whether they were campers or commuters. The returns from the questionnaire strongly supported this assumption (see Table 29). Thus, loggers living in Divisions 1, 2, and 3 were assumed to be mostly campers, and only three replies were received from commuters in these areas, while twenty replies were received from campers. Divisions 4, 5, and 9 were assumed to contain only commuters: there were no replies from campers in Division 9.

TABLE 28

DISTRIBUTION OF LOGGING POPULATION AND RETURNS FROM A MAIL QUESTIONNAIRE[1], BY CENSUS DIVISIONS, 1963

Census Division	Logging population		Questionnaires		
	Number	Per cent	Mailed	Received[2]	Per cent received
	(1)	(2)	(3)	(4)	(5)
1	176	3.8	18	6	33.3
2	53	1.2	6	4	66.7
3	201	4.4	20	14	70.0
4	461	10.0	46	16	34.8
5	470	10.2	45	19	42.2
6	785	17.1	79	28	35.4
7	613	13.3	60	26	43.3
8	1,495	32.5	150	91	60.7
9	343	7.5	34	19	55.9
Total	4,597	100.0	458	223	48.7(average)

Notes: 1. Mailing was done to a ten per cent stratified systematic sample.

2. Twelve of these were uncompleted questionnaires with appropriate explanations. Thus there remained 211 usable questionnaires.

TABLE 29

DISTRIBUTION BY CENSUS DIVISION OF A SAMPLE OF 194 LOGGERS ACCORDING TO SYSTEM OF WORKING, 1963

System of working / Census Division	Campers		Commuters		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
1	4	5.6	2	1.6	6	3.1
2	3	4.2	0	-	3	1.5
3	13	18.3	1	0.8	14	7.2
4	0	-	14	11.4	14	7.2
5	0	-	15	12.4	15	7.7
6	5	7.0	17	13.8	22	11.3
7	11	15.5	12	9.8	23	11.9
8	34	47.9	45	36.6	79	40.7
9	1	1.4	17	13.8	18	9.3
Total	71	100.0	123	100.0	194	100.0

At the same time forty-six commuters replies from these areas. As assumed, both campers and commuters live in Divisions 6, 7, and 8.

The percentage of returns received from the various areas is particularly important. Higher than average returns came from Divisions 3, 2, 8, and 9 in that order. With the exception of Division 9, these areas hold a majority of campers. The areas which contained only commuters (Divisions 4 and 5) had a percentage return lower than average. This was also true for Divisions 6 and 7, where the loggers worked under both systems. Thus the results generally follow a geographical pattern. The areas in which most of the campers live (with the exception of Division 1) are those furthest from the cutting areas and which also have the poorer road systems. These people were probably more anxious to reply to the questionnaire because they have either already been, or will be, thrown out of work if the commuting policy is introduced into all woods operations. The men of Divisions 4, 5, and 6 were possibly not so anxious to reply because they enjoy the most favourable commuting conditions.

Age Distribution

Table 30 shows that there is little difference in the distribution of campers and commuters by age groups. The average age of both groups was thirty-five years, with campers averaging thirty-six and commuters averaging thirty-three years. This coincides closely with the average

TABLE 30

DISTRIBUTION BY AGE GROUP OF 67 CAMPERS AND 119 COMMUTERS, 1963

Age in years	Campers		Commuters		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Up to 19	3	4.5	15	12.6	18	9.7
20 - 24	15	22.4	27	22.7	42	22.6
25 - 29	9	13.4	9	7.6	18	9.7
30 - 34	10	14.9	20	16.8	30	16.1
35 - 39	8	11.9	16	13.4	24	12.9
40 - 44	3	4.5	13	10.9	16	8.6
45 - 49	5	7.5	9	7.6	14	7.5
50 - 54	2	3.0	6	5.0	8	4.3
55 or over	12	17.9	4	3.4	16	8.6
total	67	100.0	119	100.0	186	100.0

age of thirty-five years for all A.N.D. loggers in 1963, since the major proportion of A.N.D. men were campers. Only 4.7 per cent of the campers were nineteen years of age or less, while 9.7 per cent of the commuters were in this category. On the other hand, 17.9 per cent of the campers were fifty-five years of age or over: only the twenty to twenty-four year

bracket had a higher percentage. Meanwhile only 8.6 per cent of the commuters were over fifty-four years of age. In short, there was a tendency for the oldest of these men not to commute, possibly because they find it difficult to discard older working habits.

Marital Status

The division of campers and commuters by marital status is very similar to the percentages given for loggers in Newfoundland by the Census of Canada, 1961. The results were:

	Census	Campers	Commuters
Married	66%	75%	67%
Single	33%	25%	33%

Size of Families

The average number of children per family according to the questionnaire was 3.5, which is the same as given by the 1961 Census. The families of campers averaged 2.6 children; the families of commuters averaged 4.1 children. The distributions are given in Appendix B, Table 1.

Centralization

The number of loggers residing at their 1963 addresses for various periods of time were as follows:

	Campers	Commuters
Less than one year	1	3
One to three years	1	2
Three to five years	3	9
Over five years	66	107

Of the five campers who changed their places of residence within the five years, four stated that their main reason for moving was to be closer to their work. Ten of the fourteen commuters also stated this as their main reason for moving.

Living Arrangements

The following figures show that the living arrangements of campers and commuters are similar:

	Campers		Commuters	
	Number	Per cent	Number	Per cent
Owning homes	47	67.1	77	64.2
Living with parents	20	28.6	37	30.8
Boarding	1	1.4	4	3.3
Renting	2	2.9	2	1.7
	70	100.0	120	100.0

As expected, these figures follow the pattern of matital status. Seventy-five per cent of the campers and sixty-seven per cent of the commuters were married, and almost all of them owned their homes.

Vehicle Ownership

The statement is frequently made by loggers that commuting has forced them to buy cars. In Chapter III it was stated that there were often sufficient cars parked near a camp to carry the entire camp crew. Data obtained from the loggers' questionnaires show that about one-third of each group owned cars: this supports the latter statement, but not

necessarily the first. It is impossible to say how many commuters would have had cars in any case.

	Campers		Commuters	
	Number	Per cent	Number	Per cent
Owning vehicles	22	31.4	47	38.8
Without vehicles	48	68.6	74	61.2

Sixty-four per cent of the campers and seventy-seven per cent of the commuters owned their cars chiefly for transportation to and from work. The average age of the cars was 5.5 years, with the average age of campers' cars being 4.8 years, and that of commuters' cars 5.9 years.

Accommodation Arrangements of Commuters While Working

Prior to the 1964-1966 Woods Labour Agreement, commuting loggers could have worked under either of the four arrangements given below. Under this Agreement loggers may not have a cabin or shack on company timber limits "except by mutual agreement" (Article X, Section 10.15). Data from one hundred twenty-three commuters were as follows:

	Number	Per cent
Going home every night	79	64.2
With a cabin in a town near the work site	6	4.9
With a cabin or shack in the woods	21	17.1
Boarding in a town near the work site	17	13.8
	123	100.0

Bowater's employees included the six with a cabin in a town near the work site, and eighteen of those with a cabin or shack in the woods. Twelve of the men who were boarding were Bowater's employees, while five worked with the A.N.D. Company. However, this is not surprising since Bowater's employs many more commuters than does the A.N.D. Company.

Transportation

The number of commuters using various methods of transportation are given below.

Method	Total	A.N.D.	Bowater's	Both companies
Private car	58	17	33	8
Bus	7	1	6	0
Truck	29	2	22	5
Boat or on foot	3	0	3	0
	97	20	64	13

Private cars were the most common method of transportation. Less than ten per cent travelled by bus, but buses were more widely used in Divisions 4 and 5 from which the percentage return of questionnaires was lower than average. About one-third of the Bowater's employees reported travelling by truck, but this does not imply that they were all being transported in the backs of these trucks.

Loggers who worked in camps came from all parts of the province to Central Newfoundland. The distances from home to camp averaged one hundred eighty-one miles, and

ranged from twenty-five miles to over four hundred miles (see Appendix B, Table 3). The average travelling cost one way was eighteen dollars. The frequency with which loggers return to their homes depends mostly upon distance and means of travel. Loggers from the Bay D'Espoir area generally remain in camp until the entire cut is taken, which may take two months or longer. Loggers from most other areas visit home at least at the end of every three weeks. Thus it appears that these campers spend between one and two dollars per working day in transportation. This expense is not incurred by commuters travelling by bus, and is probably greater than any excess of commuting costs over commuting allowances for those who travel in private vehicles. However, since it is impossible for most of these loggers to commute, the foregoing does not support the closing of camps, but merely illustrates one source of income variation.

Although their homes were an average distance of thirty-eight miles from the job sites, commuters travelled on the average only twenty miles each way. The difference arises because of commuters' cabins or shacks being between their homes and the job sites. Thus, if such cabins are no longer permitted, the average commuting distance will tend to rise slightly. Table 31 shows the distribution of commuters according to the distances travelled each way per day. Distances ranged from one to sixty-five miles, while the average travelling time one way way 49.4 minutes.

TABLE 31

NUMBER OF COMMUTERS BY DISTANCE TRAVELLED ONE WAY DAILY, 1963

Distance in miles	Number	Per cent
Up to 5	14	13.7
6 - 10	15	14.7
11 - 15	21	20.6
16 - 20	14	13.7
21 - 25	11	10.8
26 - 30	7	6.9
31 - 35	9	8.8
36 - 40	6	5.9
41 - 45	1	1.0
46 and over	4	3.9
Total	102	100.0

In summary, over fifty per cent of the commuters reported that they travelled an average of twenty miles twice per day in private cars having an average age of over five and one-half years. Most of the roads over which they travelled were unpaved. There is reason to believe that these factors resulted in much physical discomfort, more irregular working hours, and more lost time. The age and use of these cars

suggests high maintenance costs, and many operators were probably not covering operating expenses exclusive of depreciation.

Employment

The two paper companies employed the following numbers of the campers and the commuters:

	Campers	Commuters
A.N.D.	64	23
Bowater's	5	85
Both companies	2	15
	71	123

Of the campers, approximately ninety per cent worked only for the A.N.D. Company, while sixty-nine per cent of the commuters were employed by Bowater's.

Table 32 shows the distribution of loggers according to period and source of employment. The employment patterns of the seventy-one campers and one hundred twenty-three commuters are very similar. Campers were employed for an average of 5.1 months, and commuters for 5.0 months. Both groups were unemployed for almost six months. Commuters obtained on the average 1.4 months of employment from other occupations, while campers averaged one month. It is possible that campers, living mostly in the outlying areas of the province, have less opportunities to find alternative employment.

TABLE 32

DISTRIBUTION OF 71 CAMPERS AND 123 COMMUTERS BY MONTHS OF EMPLOYMENT, 1963

Category \ Months	0	1	2	3	4	5	6	7	8	9	10	11	12	Average no. of months	% of year
Campers															
Employed in the woods	1	2	4	5	17	14	15	4	4	2	2	1	0	5.1	42.5
Unemployed	1	1	3	3	10	8	13	18	11	1	2	0	0	5.9	49.2
Working elsewhere	48	4	5	6	4	2	1	0	0	1	0	0	0	1.0	8.3
Commuters															
Employed in the woods	0	3	22	21	14	8	21	13	9	5	5	1	1	5.0	41.7
Unemployed	2	5	7	10	13	26	22	6	16	9	7	0	0	5.6	46.7
Working elsewhere	73	4	12	10	8	9	6	0	1	0	0	0	0	1.4	11.6
Total															
Employed in the woods	1	5	26	26	31	22	36	17	13	7	7	2	1	5.0	41.7
Unemployed	3	6	10	13	23	34	35	24	27	10	9	0	0	5.8	48.3
Working elsewhere	121	8	17	16	12	11	7	0	1	1	0	0	0	1.2	10.0

TABLE 33

DISTRIBUTION OF 70 CAMPERS AND 120 COMMUTERS BY NUMBER OF DAYS WORKED[1] IN THE WOODS DURING 1963

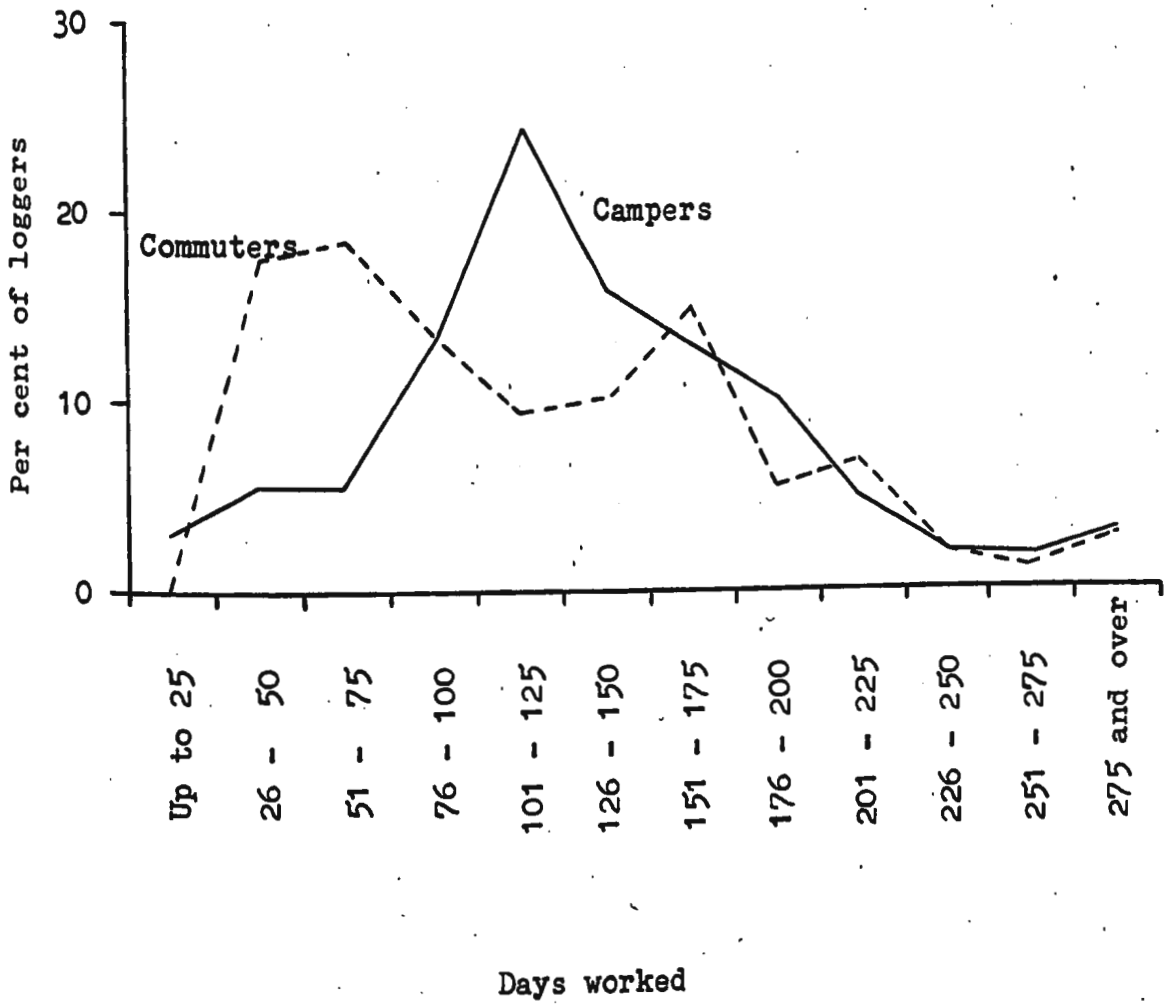
Days worked	Campers		Commuters	
	Number	Per cent	Number	Per cent
0 - 25	2	2.9	0	0.0
26 - 50	4	5.7	21	17.5
51 - 75	4	5.7	22	18.3
76 - 100	9	12.9	16	13.3
101 - 125	17	24.2	11	9.2
126 - 150	11	15.7	12	10.0
151 - 175	9	12.9	18	15.0
176 - 200	7	10.0	6	5.0
201 - 225	3	4.3	8	6.7
226 - 250	1	1.4	2	1.7
251 - 275	1	1.4	1	0.8
276 and over	2	2.9	3	2.5
Total	70	100.0	120	100.0

Note: 1. When the actual days were not reported in the questionnaire, estimates were calculated using twenty-six working days per month. This possibly gives the figures a little upward bias, since many loggers lose one or more days per month.

Table 33 and Figure 30 illustrate that the distribution of the campers by term of employment is closer to the normal curve than that of commuters. While commuters are more evenly dispersed over the year, campers are concentrated around the centre of the scale. The percentage of commuters in the 26-50 and the 51-75 day brackets is much higher than that of

FIGURE 30

PERCENTAGE DISTRIBUTIONS OF TWO GROUPS OF LOGGERS BY NUMBER OF DAYS WORKED IN LOGGING DURING 1963



Source: Table 33.

campers. The 101-125 day bracket contains the largest percentage of campers (24.2), but a much smaller percentage of commuters (9.2). The average number of days worked in the woods during 1963 by campers was 130; by commuters it was 114. The larger percentage of commuters in the lower brackets tends to support the statement that commuting per se leads to a shorter average term of employment (see page 90).

Table 34 and Figure 31 shows that the distributions of campers and commuters by annual incomes earned in logging are similar to the distributions by number of days worked. That of the campers is again closer to the normal curve. The commuters, however, show a high concentration in the income bracket of 500-999 dollars (34.2%), with a consequent skewness to the right. Meanwhile 28.2 per cent of the campers were in the 1,500-1,999 dollar bracket.

The average annual income of campers was $1,899.31; that of commuters was $1,429.15. The average daily earnings of campers amounted to $14.77 as compared with $12.24 for commuters. The daily earnings were calculated by dividing the total income earned by the total number of days worked. Although there is some doubt about the reliability of the sample, a Student's t-test shows that there is good reason to believe that the difference in average incomes is real and not due to chance factors only (see Appendix B).

These average annual earnings approximate that of $1,750 given by the Census of Canada in 1961. According to

TABLE 34

DISTRIBUTIONS OF 71 CAMPERS AND 117 COMMUTERS BY INCOMES EARNED IN LOGGING, DURING 1963

Annual income in dollars	Campers		Commuters	
	Number	Per cent	Number	Per cent
0 - 499	3	4.2	10	8.5
500 - 999	5	7.1	40	34.2
1,000 - 1,499	15	21.1	24	20.5
1,500 - 1,999	20	28.2	12	10.3
2,000 - 2,499	11	15.5	11	9.4
2,500 - 2,999	11	15.5	6	5.1
3,000 - 3,499	1	1.4	8	6.8
3,500 - 3,999	3	4.2	5	4.3
4,000 - 4,499	2	2.8	1	0.9
Total	71	100.0	117	100.0

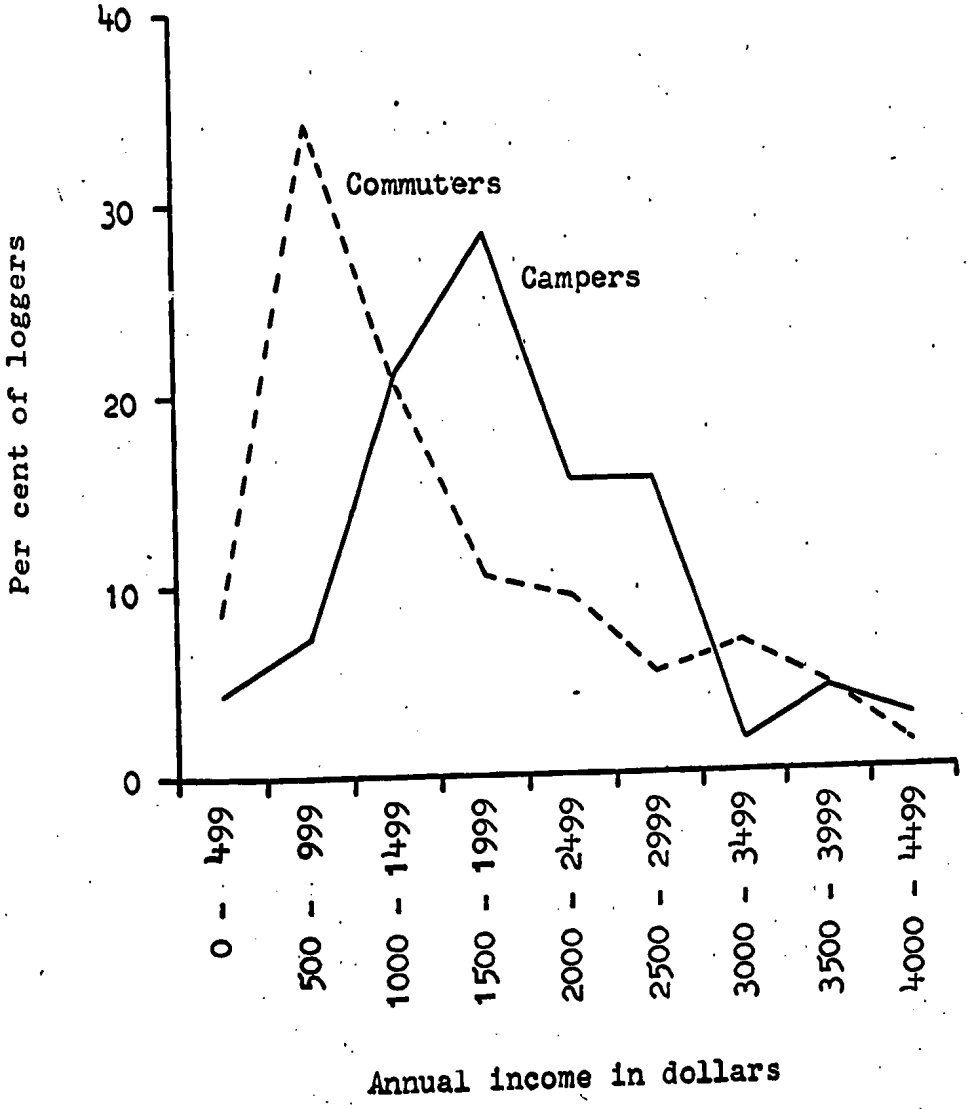
the questionnaires, however, both the average number of days worked and the average annual earnings are greater than the figures published by the A.N.D. Company (see page 82).

Table 35 shows that campers worked not less than eight and not more than ten hours per day; sixty-eight per cent worked nine hours per day. Commuters, on the other hand, worked from six to twelve hours per day, although fifty-eight per cent averaged nine hours per day. The range of working hours is thus much greater for the commuters.

Table 35 also shows the distribution of loggers by

FIGURE 31

PERCENTAGE DISTRIBUTIONS OF TWO GROUPS OF LOGGERS BY INCOMES EARNED IN LOGGING DURING 1963



Source: Table 34.

TABLE 35

DISTRIBUTIONS OF CAMPERS AND COMMUTERS BY HOURS PER DAY ACTUALLY AT WORK AND HOURS PER DAY AWAY FROM PLACE OF LODGING, 1963

Hours per day	Actually at work				Away from place of lodging			
	Campers		Commuters		Campers		Commuters	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
6	-	-	3	2.7	-	-	-	-
7	-	-	4	3.7	-	-	-	-
8	12	18.5	22	20.4	-	-	-	-
9	44	67.7	63	58.4	4	6.3	1	0.9
10	9	13.8	14	13.0	10	15.9	7	6.5
11	-	-	1	0.9	43	68.3	33	30.8
12	-	-	1	0.9	6	9.5	44	41.2
13	-	-	-	-	-	-	16	15.0
14	-	-	-	-	-	-	6	5.6
Total	65	100.0	108	100.0	63	100.0	107	100.0

the number of hours which elapsed from the time of their departure in the morning until their return in the evening. None of the campers spent more than twelve hours away from camp; sixty-eight per cent required eleven hours, while over six per cent needed only nine hours. Again the dispersion is much greater for commuters, with times spent ranging from nine to fourteen hours. Over sixty per cent of the commuters spent twelve or more hours away from home each day.

Campers worked an average of 8.95 hours per day, and commuters 8.81 hours per day. The average number of hours spent away from the place of lodging was 10.80 for campers and 11.79 for commuters. Thus commuters required approximately twelve hours, and campers eleven hours, in order to obtain nine hours of actual working time. The difference of one hour was required for travelling. This is supported by the earlier finding that the average one way travelling time was approximately fifty minutes. Thus the normal work days of the two groups were spent in the following manner:

	Campers	Commuters
Working	9 hours	9 hours
Lunching	1 hour	1 hour
Travelling	1 hour	2 hours.

Analysis of the Causes of Lost Time

Table 36 summarizes the results of the questionnaires concerning lost time during 1963. Lost time in this context consists of those days when the loggers were unable to report

TABLE 36

WORKING DAYS LOST FOR SPECIFIED REASONS BY

67 CAMPERS AND 109 COMMUTERS, DURING 1963

Causes of lost time	Campers				Commuters			
	Number of men	Days lost	% of days lost	Days lost per man	Number of men	Days lost	% of days lost	Days lost per man
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sickness	13	53	9.8	4.1	29	269	15.9	9.3
Rain	40	295	54.4	7.4	72	596	35.2	8.3
Snow	11	67	12.4	6.1	44	299	17.7	6.8
Car breakdown	2	3	0.5	1.5	36	181	10.7	5.0
Power saw failure	23	78	14.4	3.4	35	152	9.0	4.3
Bad roads	2	3	0.5	1.5	20	160	9.5	8.0
Other equipment failure	4	14	2.6	3.5	5	16	0.9	3.2
Other reasons	3	29	5.4	9.7	3	18	1.1	6.0
Total	..[1]	542	100.0	..	..[1]	1,691	100.0	..

Note: 1. Totals are meaningless here because most men lost days for more than one reason.

for work or were forced to leave work. The stub of the table lists eight of the most important causes of lost time. The number of men losing time for the various reasons is given in Column (1) for campers and Column (5) for commuters. Columns (2) and (6) contain the actual number of days lost. Columns (4) and (8) show the average number of days lost per man for each reason. Thus this table illustrates the relative importance of the causes of lost time.

For the campers, the most frequently mentioned causes of lost time were rain, power saw failure, sickness, and snow in that order. In terms of total days lost, rain accounted for 54.4 per cent, power saw failure for 14.4 per cent, snow for 12.4 per cent, and sickness for 9.8 per cent.

Rain was also the cause of lost time most frequently mentioned by the commuters, followed by snow, car breakdown, power saw failure, and sickness. Of the total days lost, rain accounted for 35.2 per cent, snow for 17.7 per cent, sickness for 15.9 per cent, and car breakdown for 10.7 per cent.

Thus the relative importance of the causes of lost time is different for the commuters than for the campers. However, comparisons between Columns (4) and (8) are probably more important.

Columns (4) and (8) show that for every cause of lost time (with the exception of the last two) the number of days lost per man for each reason is greater for commuters

than for campers. The explanation of the high figure for "Other reasons" in Column (4) is that one of the three campers stated that he lost twenty-one days. Whereas car breakdown and bad roads were of the least significance to campers, they were very important to commuters. The number of days lost per man because of illness was more than twice as great for commuters as for campers. This supports the opinion on page 145 that commuters tend to stay at home longer for minor accidents and illnesses. The average number of days lost per man for all reasons was 8.1 for the campers and 15.5 for the commuters.

In short, these findings support the consensus of opinion in the industry that commuting results in more irregular working hours and more lost time.

Analysis of Loggers' Incomes

Table 37 contains a summary of the gross incomes of two groups of loggers from various sources as declared in the questionnaires. This table provides some idea of the structure of loggers' incomes, and the most important feature is that the percentages of total income coming from the various sources are almost the same for both groups. Woods work alone accounted for approximately three-quarters of total income from all sources. However, it accounted for 92.5 per cent of the earned income of the campers, and 85.5 per cent of the earned income of the commuters. Employment in all other industries yielded 6.2 per cent of the total income

TABLE 37

GROSS INCOMES DECLARED BY 71 CAMPERS

AND 117 COMMUTERS, FOR 1963

Source of income	Campers		Commuters	
	Dollars	% of total	Dollars	% of total
Earned income:				
Woods work	134,851	77.5	167,210	70.6
Fishing	4,049	2.3	10,180	4.3
Farming	416	0.2	200	0.1
Mines or survey	-	-	750	0.3
Government	1,600	0.9	1,183	0.5
Town Councils	-	-	145	0.1
Other work	4,860	2.8	15,968	6.7
Total	145,776	83.7	195,636	82.6
Transfer payments:				
Unemployment insurance	20,486	11.8	24,703	10.4
Workmen's Compensation	656	0.4	1,322	0.6
Total	21,142	12.2	26,025	11.0
Non-cash income:				
Vegetables	1,194	0.7	2,980	1.3
Firewood	4,940	2.8	7,555	3.2
Meat and fish	965	0.6	2,405	1.0
Other items	-	-	2,130	0.9
Total	7,099	4.1	15,070	6.4
Total income from all sources	174,017	100.0	236,731	100.0

of the campers, and 12.0 per cent of the total income of the commuters. Campers received 11.8 per cent and commuters 10.4 per cent, of their total income from unemployment insurance.

Incomes from transfer payments do not include amounts received for able-bodied assistance, family allowances, old age pensions, or other welfare payments. When the questionnaire was designed, it was felt that the loggers would be more reluctant to complete and return the questionnaire if they were asked to supply this information. Besides, there are other sources from which incomes from transfer payments have been estimated. For example, Copes estimated that transfer payments in total accounted for twenty per cent of the total cash income of Newfoundlanders in 1959.[1] The A.N.D. Company reckoned that Family Allowances and Old Age Security together accounted for about $233 per family in 1963.[2] Also, there were 1,036 loggers receiving able-bodied assistance in March 1962, and 1,046 in March 1963, which indicates that a large proportion of loggers receive this type of support for some time during each year.[3]

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[1] P. Copes, op. cit., Table 12.1, p. 192.

[2] A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p. 3.

[3] Annual Report of the Department of Public Welfare, for the year ended March 31, 1962, Table VIII, p. 79, and for the year ended March 31, 1963, Table VIII, p. 77.

Table 38 shows the average annual incomes received by both groups of loggers from various sources during 1963. This table also reveals that the mobilities of the two groups of workers among the different industries were similar. The average income of the campers from logging was $1,899, and of commuters $1,429. Fishing was the most important ancillary occupation, and those who worked therein earned an average of $543. However, fishing attracted only about thirteen per cent of these loggers, which endorses the opinion that the number of fishermen who use logging as a source of ready cash income is probably low. Fifteen of the seventy-one campers (21.1%) worked in at least one occupation besides logging; five of these worked in two occupations besides logging. Thirty-six of the one hundred seventeen commuters (30.8%) worked in at least one other occupation, and six of these worked in two other occupations. Eight campers and nineteen commuters worked in occupations not listed in Table 38; probably the most important of these was construction.

Average unemployment insurance receipts were higher for the campers than for the commuters. This is consistent since both groups were unemployed for over five months of the year, and campers were likely to receive higher benefits because of making larger contributions while employed. Table 37 and 38 also show that firewood was the most important component of non-cash income. The values placed upon the

TABLE 38

NUMBER OF LOGGERS WORKING IN VARIOUS INDUSTRIES, AND THEIR AVERAGE INCOMES FROM ALL SOURCES AS REPORTED IN THE QUESTIONNAIRE, 1963

Source of income	Campers		Commuters	
	Number reporting	Average income	Number reporting	Average income
Earned income:				
Woods work	71	$1,899	117	$1,429
Fishing	9	450	16	635
Farming	1	416	1	200
Mines and survey	-	---	1	750
Government	2	800	3	394
Town Councils	-	---	2	73
Other work	8	608	19	840
Transfer payments:				
Unemployment Insurance	51	402	69	358
Workmen's Compensation	4	164	8	165
Non-cash income:				
Vegetables	20	60	35	85
Firewood	37	137	55	137
Meats and fish	13	74	31	78
Other items	--	--	8	266

Notes: 1. All averages are calculated on the basis of the number of persons reporting in each category, and not on the basis of the total number of questionnaires returned. It is therefore meaningless to total the columns above.

non-cash items are strikingly close for both groups.

In Table 29 an attempt is made to construct an estimate of the annual income of an average logger. However, this must be interpreted carefully, because the term "average logger" is something of a misnomer. As outlined above, the logging population is far from homogeneous; loggers have different working habits and different sources of supplementary income. However, while probably only one-quarter

TABLE 39

ESTIMATED ANNUAL INCOME OF AN AVERAGE LOGGER IN NEWFOUNDLAND, 1963

Source of income	Amount	
Earned income:		
Logging	$1,600	
Other occupations	200	
		$1,800
Transfer payments:		
Unemployment Insurance	350	
Other transfer payments[1]	300	
		650
Non-cash income:		
Vegetables	25	
Firewood	125	
Meats and fish	50	
		200
Total income from all sources		$2,650

Note: 1. Includes Family Allowances, Old Age Pensions, Workmen's Compensation, etc.

of the loggers work in occupations other than logging, most of them receive unemployment insurance and other transfer payments, as well as non-cash incomes.

Other Factors

Since commuting is relatively new, most of the loggers working under this system in 1963 would have previously worked in camps. They were therefore expected to be thoroughly familiar with working and living conditions under both systems. Accordingly, they were asked a number of questions which would indicate their preferences, as well as their appreciation of both systems. Their answers are reported below.

The following replies were received from commuters to the question "Would you have lost as many days if you had worked in a camp?":

More..... 1, or 0.8%
Less.....87, or 70.7%
The same....15, or 12.2%
No answer...20, or 16.3%

Commuters were asked if they would want more, less, or the same amount of pay if they were working from a camp. The replies were:

More.....10, or 8.1%
Less.....37, or 30.1%
The same....55, or 44.7%
No answer...21, or 17.1%

The average amount demanded by those who said they would want more was $1.71 per day; those who would want less would be willing to sacrifice $2.60 on the average. Thus most commuters felt that they would have lost less days if living

in camps, and nearly one-third of them would accept less pay. Since people are generally very reluctant to accept a reduction in wages, the foregoing statement seems to indicate that many of these loggers were dissatisfied with commuting.

Campers were also asked if they would want more or less money if working under the commuting system, and they replied:

More.....62
Less..... 1
The same... 1
No answer.. 7

These answers, however, are not completely valid since most of the campers lived outside feasible commuting distances of the work sites. They would thus have to board or live in shacks or cabins, and would naturally desire more money because of the additional cost and inconvenience.

To the question "Would you rather be working from a camp?" the following replies were received from commuters:

Yes.....106, or 86.2%
No..... 11, or 8.9%
No answer.. 6, or 4.9%

The vote showed a strong preference for camps.

Both the campers and the commuters were asked if they agreed with the abolition of woods camps. No campers agreed, seventy disagreed, and one failed to answer. Only seven of the one hundred twenty-three commuters were in favour of the

abolition of camps, while one hundred eleven disagreed, and five did not answer. An analysis of those in favour of the abolition of camps shows that six worked with Bowater's, and one with the A.N.D. Company. Commuting distances ranged from ten to sixty-five miles, or an average of 22.4 miles. The logger travelling sixty-five miles was transported by bus over a paved highway. One man chose to commute rather than live in a camp only fourteen miles from his home.

Analysis of Replies from Seventeen Loggers Who Worked on Both Camping and Commuting Jobs During 1963

It was considered expedient to analyse this group separately to see if they differed from the other two groups. In almost every respect, however, these loggers gave information similar to that given by the others. The average age was twenty-eight years. Ten were married and seven were single. Eight of the ten married loggers owned homes, and six of the seventeen owned vehicles, of which the average age was five years. It took approximately one hour to commute an average of twenty-three miles. The normal work days, when camping or commuting, were similar to those already outlined for campers and commuters on page 119. The reasons for lost time rank in approximately the same order of importance as before. The number of days lost per man for each reason was also greater for commuters than for campers (see Appendix B, Table 4).

These seventeen loggers received approximately the same amount of employment and income as the other two groups.

The average term of employment was 127 days as compared with 114 for commuters and 130 for campers, and the average annual income was $1,699 in comparison with $1,429 for commuters and $1,899 for campers. The average income from unemployment insurance was $379, which is also higher than that for commuters and lower than that for campers. All seventeen voted against the abolition of camps.

Some General Statements of Loggers

The overwhelming majority of the loggers who responded to the questionnaire were not in favour of the abolition of woods camps. Accordingly they pointed out many disadvantages of commuting but mentioned few advantages. It is impossible in this essay to cover all the replies received, and therefore only the more important points will be mentioned.

The loggers registered general dissatisfaction with boarding in private homes. Board rates ranged from $35 to $90 per month, with an average of $58. There were frequent complaints about insufficient food, and noon lunches were considered particularly inadequate. The lunches packed by the cookhouse staff in a camp were said to be more substantial. Boarding houses were also reported to have no facilities for drying clothes. In addition, boarding houses are scarce at the prices loggers are willing to pay, and because of the nature of the logger's employment he is not always welcomed as a boarder.

Frequent complaints regarding the lack of first-aid facilities on commuting jobs were received. However, the present Agreement implies that the same facilities are to be provided on both types of operations (Article X, Section 10.34). Loggers were extremely strong in their criticism of shacking.

Few loggers were of the opinion that commuting was advantageous to them, but they often stated that it was financially advantageous to the companies. Practically every logger felt that the Provincial Government should take steps to reverse the trend towards commuting. Only a few men considered their union sufficiently powerful to oppose the companies on this issue.

Other Opinions

Most persons in the industry will disagree that a large majority of the loggers are strongly opposed to the commuting system. They reason that the loggers see advantages in both systems, depending on the conditions, but they are more ready to voice the disadvantages of the newer one. The experience of the A.N.D. Company in the Grand Falls area reflects the typical attitude of the companies: although loggers may state they prefer camps, yet many of them will actually choose to commute when they have the opportunity. A foreman for Bowater's in Deer Lake suggested that many of the men in this community would now

strongly object if they were told they could not return home every night. At the same time, they would readily point out the inconveniences of commuting. It seems that loggers are conservative; they are suspicious of change. This opinion is endorsed by the President of The Newfoundland Contractors' Association, who suggested that in a few years the loggers will prefer commuting.

CHAPTER VI

SOCIAL AND ECONOMIC EFFECTS OF COMMUTING

Technological changes within a large industry can have widespread economic and social effects. The employers are affected through changing costs and operating efficiency; the shareholders through profit variations. Economically the employees and their families are directly influenced through employment and incomes. Alterations in working and living conditions affect them socially and economically. Similarly there are secondary effects upon the community as a whole. The magnitude of these effects depends upon the type and extent of the technological change.

The change from a system of woods camps to a system of commuting is producing economic and social consequences in this province. Unfortunately, it is difficult to determine the precise nature and extent of these results because of the paucity of statistical information. Social effects, of course, are more difficult to evaluate quantitatively. In spite of these difficulties, however, this study attempts to delineate the most important factors.

The 1964-1966 Woods Labour Agreement devotes particular attention to commuting whereas the previous Agreement contained only minor references to this subject. The present Agreement naturally attempts to solve the problems of greatest concern to employers and labour. The Agreement, therefore, alludes to some of the social and economic effects of commuting. In turn the Agreement will largely determine what the future social and economic effects of commuting will be. Therefore, these sections of the Agreement which deal with commuting, and working and living conditions, will be reviewed in this chapter. It is not within the scope of this thesis to analyse this document in detail. The relevant extracts are given in Appendix C.

Commuting and the 1964-1966 Woods Labour Agreement

Section 10.06 of Article X requires that all vehicles now used for the transportation of men must be covered, properly ventilated, and heated. Furthermore, the covering must be of wood or metal, which eliminates the possible use of canvas or tarpaulins. Under Section 16.03 of Article XVI the employers are to provide by January 1, 1966 "free and acceptable transportation for commuters". Only factory-built buses or automobiles are to be used for transportation by road. According to Section 16.04 employees will be permitted thereafter to use their own cars only "by mutual arrangement between the parties". Sections 10.06 and 16.03 are clearly designed to prevent any further transportation

of men in the uncovered and (or) unheated backs of trucks. Section 16.04 reveals that, contrary to certain opinion, private cars may still be used after 1965. Thus, it seems that the major change from the present practice is the payment of higher allowances for distances exceeding thirty miles (see Appendix C).

The lack of shelter at waiting and lunching places has resulted in much physical discomfort to some loggers. Under Section 10.06 shelters are now to be erected "when practical" and heated "when necessary". While it is difficult to stipulate the conditions which make such steps "practical" or "necessary", the indefiniteness involved may well result in instances of unsatisfactory working conditions.

There are two clauses in the 1964-1966 Agreement which were not in the previous Agreement and which will affect considerably both employers and employees. One is the subsidized boarding clause (Section 16.06), and the other is the payment of walking and riding time (Article XVII). The companies have agreed to subsize at the agreed camp rate employees who board in a community of which they are not residents. They have also agreed to pay the loggers at prescribed rates for walking and riding time in excess of forty-five but less than one hundred twenty minutes (until April 30, 1965, after which the maximum free time will be thirty minutes).

These two clauses will tend to operate against workers whose homes are outside what may be called the "free time radius" from the work site. Other things being equal, the workers within the free time radius will be hired before those to whom the employers will have to pay walking and riding time or board subsidies. The example of loggers who receive board subsidies is sufficient to illustrate this point. Wood cut by such persons will cost over fifty cents more per cord, assuming an average production of less than three cords per man day and a subsidy of slightly over $1.50 per man day. Thus the major condition of hiring for commuter jobs is not the productive ability of the worker, but whether he lives within the free time radius. This situation may tend to lead in the short run to a lower grade of employees, with consequent lower average production and an upward pressure on costs. Thus the employers will sometimes have to decide between a poorer grade of non-subsidized workers and a higher grade of subsidized workers.

As employers, the contractors are in a special position in one respect. They cut and deliver wood at a price which is arrived at by agreement with the companies. The Report of the Commission of Enquiry on the Logging Industry[1] emphasizes that the paper companies have an overwhelming advantage in such bargaining, and can almost

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[1] Op. cit., pp. 29, 30.

unilaterally determine the price the contractors will receive. Thus the contractors may bear all or part of the incidence of the extra costs, depending upon their bargaining strength or the generosity of the paper companies.

From the workers' point of view, the situation may be reduced to the following possibilities:

(a) assuming an adequate supply of labour within the free time radius, workers resident outside that radius will not be employed in the woods;

(b) assuming a scarcity of labour within the free time radius, the workers from outside will be hired in accordance with the principle of minimizing subsidies. Those who are hired will benefit from the present Agreement, since they previously had to pay their own board as well as part of their own transportation expenses.

Possibility (a) is advantageous to employers and employees. Both groups benefit as the commuting distance is minimized. However, since the loggers cannot continually change their places of residence to remain close to changing work sites, the present situation, which is a combination of (a) and (b) will tend to continue in the short run.

The inclusion of these clauses in the 1964-1966 Woods Labour Agreement evidences the desire to obtain a full-time professional logging force. The smaller numbers of men who live within the free time radius will tend to be employed for longer periods of time.

The administration of these two clauses will place additional burdens upon the employers, and possibly upon the union. The Agreement does not cover every situation

upon which decisions must be made. For instance, starting and finishing points for each community and work site must be established. Walking to and from work is agreed to be at the rate of three miles per hour, but riding time is to be established "by agreement between the parties" (Section 17.01). Such decisions will have to be made locally where the parties are familiar with the particular situation. This type of arrangement will likely lead to friction between employers and employees. Thus there may be additional demands upon the union. In any event, administrative detail will be increased as payroll records must account for these extra items.

Some Effects on the Companies

The basic concern of the two paper companies is whether the use of commuting improves the firm's profit position. Does it reduce the cost of wood delivered to the mill or improve the quality of the final products? Although the first question generally receives more attention, the second may be equally important.

The general opinion that commuting has permitted a reduction in the cost of wood is in effect conceded by the companies. Company officials point out, however, that it is extremely difficult to give an accurate figure for the amount saved. The cost of wood depends upon many variables such as weather conditions, the area worked, and the types of operation. Officials suggested that it will take

a number of years for commuting to become firmly established and for reliable statistics to be collected. But already one can find areas where costs are being reduced. The most obvious of these is where there are no camps to operate.

Table 40 shows the estimated costs of operation by the A.N.D. Company of a standard camp with a capacity of seventy men. For budgeting purposes this company uses a cut of 10,000 cords of pulpwood, which usually requires at least 9,300 man days to cut and haul under average conditions. The total cost of running the camp is estimated at $31,000, or $3.10 per cord. From this is deducted the revenue collected from employees for board and lodging, leaving a net cost of $17,000, or $1.70 per cord.

Some officials of the A.N.D. Company felt that this is a conservative figure. The actual cost may be approximately $1.90 per cord. Of course, actual costs vary widely from one camp to another, and the average cost in any given year is affected by the percentages of wood cut in high and low cost camps. However, this study does not attach great importance to the size of this estimated cost saving, but rather to the fact that some saving exists.

The cost per cord of wood obtained from commuter operations is less than that of wood obtained from camp operations only if the savings on camp costs exceed any additional costs incurred. According to company sources, the only additional costs which can be clearly distinguished are those of commuting allowances. While there may be extra

TABLE 40

ESTIMATED COSTS[1] OF OPERATION OF A STANDARD CAMP WITH A CUT OF 10,000 CORDS, FOR THE A.N.D. CO., LTD., 1964

Camp outfits	$ 1,100
Fuel	1,600
Lighting	400
Food	14,500
Wages, staff	7,000
Maintenance	1,000
Depreciation[2]	5,000
Total cost	$31,000
Deduct: Board revenue[3]	14,000
Net cost	$17,000

Notes:
1. No figure is included for insurance because the A.N.D. Co., Ltd. considers its woods equipment self-insured; that is, it is thought more profitable to absorb any losses than to pay insurance premiums. Camp buildings are therefore not covered except in this manner. Selective risks are not taken because premiums would be too high. It was suggested that a fair rate would be $1.25 per hundred, or $450 per camp per year.
2. The depreciation rate is based on a seven year life of a camp. Actually camps are usable for longer periods, but in most cases they are moved at least twice. Costs of moving are not accounted for except in the depreciation figure, and these are considerable since sites have to be prepared, buildings dismantled, transported, and re-erected, and some damage is bound to occur. The capital cost of a standard 70-man camp is now given as $36,000. The cost of a 140-man camp is approximately $53,000.
3. Board is calculated on the basis of $1.53 per man day.

Source: A.N.D. Co., Ltd.

administrative and supervisory costs, these are not easily separated. Officials also stated that the standard of roads built for camp operations approximates that of commuter operations, so that little, if any, additional cost is incurred in this respect.

On all commuter operations the employers are required either to provide the workers with free transportation or to reimburse those who provide their own. Under the terms of the 1962-1964 Woods Labour Agreement this compensation was at the rate of fifty cents per cord for pieceworkers, and one dollar per day for all others covered by the Agreement.[2]

An official of the A.N.D. Company estimated that the average cost is about seventy cents per cord. The average cost for Bowater's was given as eighty-five cents. The reasons for the differences in these estimates are not readily ascertainable. The figures for the A.N.D. Company, however, show a saving of approximately one dollar per cord because of commuting. This would accrue to nearly $100,000 on the amount of wood cut by commuters for the A.N.D. Company during 1963 (see Table 14).

It is rather unfortunate that similar figures could not be obtained for Bowater's, but probably the differences would not be very great. Again, a saving of one dollar per

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[2] The Woods Labour Agreement, 1962-1964, p. 22.

cord on their cut in 1963 would have amounted to over $300,000 (see Table 14).

There is some evidence that commuting can also help to improve the quality of the paper produced. It was pointed out earlier that fresh wood makes brighter, or better quality, paper. Year-round logging, which is essential in order to maintain fresh supplies of wood, depends mostly upon the advances in mechanization for facilitating handling and transporting of wood. Yet there are two ways in which commuting is or can be beneficial.

First, the commuting system has an inherent flexibility which is lacking in the camp system. Even with the existing roads and means of transportation, commuter operations can be quickly shifted from one area to another. Thus, if, for any of a number of reasons, an emergency arises and wood cannot be obtained from the regular area, the whole operation can be immediately shifted to a new location. The shifting of a camp operation would involve the preparation of a new site and the dismantling, transporting, and re-erecting of buildings. This may take several days or weeks to accomplish, depending on the situation. But commuter operations usually have only two or three small buildings which can be readily transported on trailer-trucks. Therefore commuting helps to ensure that regular year-round deliveries to the mills will be maintained.

Second, the operation of camps involves overhead expenses not incurred under commuting. While it is true

that fewer camps would be operating on a full time basis, the extra overhead costs per unit of production would remain. Besides, the operation of camps in the winter and spring is more expensive than in the other seasons. Therefore, commuting is an aid to year-round production because it eliminates the need for full time operation of camps.

Year-round logging not only leads to an improvement in the quality of paper, but also eliminates the need of planning cuts ahead of time. As estimating is not always accurate, changing factors could leave the companies with larger inventories than needed. Planned investment in inventories could actually lead to over-investment. Thus tighter cost control can be affected through the elimination of inventory fluctuations.

While the introduction of mechanized logging is the most important of the factors which make year-round operation possible, yet this in itself becomes a pressure that year-round operation be maintained. It is vitally important to keep these machines working continuously while conditions permit. Under the more labour intensive conventional system of logging it was possible to discharge the men and close down operations during the poorer seasons. Idle machines, however, still incur expenses. Production costs are normally lowered by keeping a smaller number of machines in continuous operation.

Thus it appears that commuting helps to improve the

competitive position of the pulp and paper mills in Newfoundland. Parties outside the industry do not seem to appreciate the possible effect of commuting in improving the quality of newsprint, but are more concerned about costs. This technological change is economically justifiable to the extent that it improves the efficiency of the industry.

Supervisory Problems

The above effects are more readily observed in that they directly affect company profits. However there are other considerations indirectly affecting the companies through the foremen and contractors. These factors may be noticed in the separate cutting operations.

A variety of problems arises because commuting permits the employment of larger numbers of men on each cutting operation. The immediate effect is to speed up the rate of cutting, which is generally beneficial to the employers since it reduces overhead costs and costs per unit of production. On the other hand, employees generally suffer because it shortens their terms of employment. Because logging by commuters depends upon labour supplies within a certain radius of the work site, the loggers are unable to obtain employment in the woods after the cut for their area has been secured.

The employment of larger numbers of men per operation leads to an increase in the duties of supervision and administration. Despite this fact, commuter operations

have generally been run with little, if any, increases in the number of supervisory personnel per operation. A standard camp operation has a foreman and sub-foreman who determine where each man is to work and ensure that proper safety measures and cutting practices are followed. The scaler also assists in checking cutting practices. While the staff members on a commuter operation have the same responsibilities, they usually have more men to supervise. In addition, there is less selection of employees on a commuter operation which is cutting in the conventional manner. This does not apply to mechanized operations because the number of men is limited by the number of machines, and employers select the best men for their work crews. Where employers are less selective the quality of loggers is lower, thereby requiring greater supervision. But in actual fact, they are often less strictly supervised. Under these circumstances the desired harvesting principles are more difficult to observe.

Safety

In woods operations a premium is placed upon safety; for example, the wearing of hard hats is mandatory. Various types of protective clothing have been worn to reduce the incidence of cuts from saws and axes, which are the most common forms of accidents. According to the Safety Director of the A.N.D. Company, the enforcement of safety regulations on commuter operations is more difficult than

on camp operations, and this has resulted in proportionately more accidents. Another factor has been the poorer grade of loggers. In addition, many men treat each other for minor accidents, so that if the accident does not result in lost time the foreman may never know of its occurrence. Thus it becomes more difficult to eliminate the causes of accidents.

An increase in the accident frequency results in a direct financial loss to the companies because of the time lost, and because of higher rates for Workmen's Compensation, which are based on the volume of claims arising out of the various industrial classifications. The Safety Director stated that commuters tend to remain off work for longer periods and for more trifling reasons, such as minor cuts. The financial effect of losing a given amount of time is not as great under commuting as under the camp system, since overhead costs are less for the former.

Records and Statistics

Records of commuter operations are more inaccurate because there is less control. This applies particularly where the men provide their own transportation. On those operations where workers are transported by bus, however, it is possible to keep more accurate records. Under the former system the foreman seldom knows the number of men on the job, or their times of arrival or departure, which in turn depend upon travelling distance, weather, driving conditions, mechanical troubles, and many other factors.

Thus it is impossible to keep accurate productinn and earnings statistics since the foreman does not know how many hours each man works per day. In such cases the foreman often records more hours than were actually worked. Such statistics are meaningless, and cannot be compared to those collected on a camp operation where the foreman knows more accurately the hours worked.

The most accurate records of all will be kept for the mechanized operations because there are only a few machines, and each has a fixed number of men. Because these machines represent heavy capital investment, the companies will exert extra efforts to collect accurate information on machine productions.

Although conclusive statistics were not available, officials of the A.N.D. Company suggested that production per man day on commuter operations was less than on camp operations. They also felt that the main reason for this was the more irregular working hours. This opinion is supported by statistics from the Bishop's Falls Division where most of the wood is cut by commuters, and where production per man day declined in three years:[3]

1961 .... 2.11 cords
1962 .... 2.05 cords
1963 .... 1.92 cords

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[3] A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1962 and 1961, p. 3.

The other divisions of A.N.D. woods operations showed higher productions per man day in 1963 than in 1962, but they also had higher percentages of wood cut from camps. In short, the number of cords produced per man day and the cost of production per cord are both lower under commuting. Of course, the latter factor is the more important.

Again, it must be recognized that conditions vary from one job to another, and some contractors or foremen may experience better production rates with commuting than with camps. One contractor stated that in his experience some young men tended to spend more time actually at work on commuter jobs than when working in camps. This refers to the new camps, where these men prefer for trifling reasons to remain in the clean and comfortable camp rather than go into the woods; for similar reasons they tend to return to the camp earlier in the day. On the other hand, the routine of camp life tends to produce consistent working habits.

The effects of diet on production under the two systems were discussed with the A.N.D. Company and persons outside the industry. The consensus of opinion was that loggers usually do not eat as well at home as they do in camps, but it cannot be statistically verified that diet affects production rates.

Supply of Labour

The introduction of commuting has not given rise to

shortages in the total supply of labour, since a labour surplus exists. However, the A.N.D. Company experienced difficulty in obtaining men for the more remote camps in the Millertown Division, while too many applicants were available for employment on commuter jobs in the Grand Falls area. This indicates to some extent the preference of some loggers. The alternative of either commuting or working in camps gave rise to this problem. If camps only were used they would all be filled in order of preference, which is largely determined by location and timber quality. However, on each non-mechanized commuter operation there is no fixed ceiling to the number of men that may be employed, although there may be an optimal limit. Thus it appears that some men prefer to take a chance on obtaining employment on jobs within easy commuting distance rather than accept employment in the most distant camps, even though the camp jobs may promise longer periods of employment.

Some Effects on Communities

The effect of commuting upon logging communities depends upon their distances from the cutting areas. Some communities in the peripheral sections of the province have suffered from unemployment due to the partial abolition of camps. However, if the volume of wood cut does not change, a decrease in employment in marginal areas will be offset by an increase in employment in areas closer to the logging sites: total employment will thus remain unchanged.

The figures below show that the percentage of the total A.N.D. logging force supplied by a group of eighteen of the largest logging towns increased over the three years:[4]

	1961	1962	1963
Total work force	3,918	3,590	2,955
Number from the 18 towns	1,535	1,580	1,356
Per cent from the 18 towns	39	44	46

Both the total work force and the numbers coming from the eighteen towns decreased over the three years. The percentage increase coming from this group indicates that they suffered proportionately less unemployment than other towns. Thus increasing proportions of the work force are being drawn from the larger logging communities.

Table 41 shows the Newfoundland areas which supplied the A.N.D. loggers for the years 1961 to 1963. The major proportions came from Notre Dame Bay and Bonavista Bay. The more outlying areas contributed few loggers in both absolute and relative terms. The Fortune Bay and Hermitage Bay area was an exception with a marked increase. Since the closing down of Bowater's camps there has been a tendency for all loggers in the marginal areas to look to the A.N.D. Company for employment. The extra loggers from the Fortune-Hermitage area were employed because of their reputation as excellent cutters.

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[4] A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p. 8.

TABLE 41

ORIGIN BY COASTAL AREA OF LOGGERS WORKING WITH THE A.N.D. CO., LTD., 1961, 1962 AND 1963

Coastal area	1961		1962		1963	
	Number	Per cent	Number	Per cent	Number	Per cent
Notre Dame Bay	2,309	58.9	2,165	60.3	1,879	63.6
Trinity Bay	620	15.8	411	11.4	256	8.7
Bonavista Bay	650	16.6	659	18.4	518	17.5
Placentia Bay	188	4.8	143	4.0	111	3.8
Conception Bay	23	0.6	17	0.5	7	0.2
Fortune Bay and Hermitage Bay	81	2.1	160	4.5	136	4.6
St. Mary's Bay	16	0.4	8	0.2	7	0.2
Cape Pine to Cape St. Francis	3	0.1	1	-	1	-
West Coast	25	0.6	19	0.5	29	1.0
White Bay	3	0.1	7	0.2	11	0.4
Outside places	-	-	-	-	-	-
Total	3,918	100.0	3,590	100.0	2,955	100.0

Source: A.N.D. Co., Ltd., Woods Labour, 1963, and a Comparison with 1961 and 1962, p.6.

Commuters whose homes are not within commuting distance of the work site must either board (or rent) in a suitable town, or build a temporary dwelling closer to the work site. The latter is often cheaper, and numbers of such dwellings have been erected in and around certain logging communities. As a special case, a delegation of loggers approached the authorities in a community who permitted the building of "shacks" rather than allow the men to be unemployed. Such buildings were often very crudely constructed, and detracted from the general appearance of the communities, as well as being unsanitary and a fire hazard. The attendant social problems have been recognized, but where no local government exists it is difficult both to prevent and to cope with shacks.

A novel arrangement for the accommodating of loggers has developed in one small community. This community, with a population of only 621 in 1961, had two or more cutting operations within commuting distance in 1964. One operation was only thirteen miles away, but the contractor planned to hire men from outside communities, being unable to find sufficient suitable labour in the town. The contractor was inclined to select his men carefully since the operation was to be highly mechanized. The "non-residents" were to board at an establishment operated by a private entrepreneur in the town. The arrangements closely parallelled those of a camp, although they were generally of a lower standard. The board rate was to be two dollars per day.

This private enterprise resulted from shortages of acceptable labour and suitable boarding houses. The arrangement was convenient for employer and employees, since the bus would have to make only one stop and the men would have shelter while waiting. The paper company for whom the wood was being cut was able to remain detached from this situation. Commuting allowances were to be paid only on the basis of cords and days, so that the distances which the loggers had to travel and their living accommodations were of no financial concern to the companies, provided that working efficiency was maintained. However, they became directly involved with the signing of the 1964-1966 Woods Labour Agreement in August because of the new clauses concerning the payment of walking and riding time and board subsidies.

The use of such large boarding establishments is tantamount to moving the camps from the woods to the towns. The reaction of the community authorities to this development was not ascertained; but where no water and sewage systems exist (as in the case mentioned above) sanitation problems are bound to arise. Private operators are not likely to install voluntarily expensive sewerage disposal systems.

The A.N.D. Company is planning a similar experiment in another logging community. They plan to build a camp there with accommodation for one hundred forty men. Transportation to the job sites is to be provided by bus. The company hopes that the men will thus be able to enjoy

the benefits of community life while living in "camp".

In summary, commuting tends to benefit those communities close to the work sites inasmuch as employment and incomes are increased. An increase in incomes will lead to improvements in social services, and enhanced spending on property improvements. Conversely, of course, outlying communities will suffer unless alternate employment opportunities are found. Although these effects have perhaps not been very noticeable as yet, they will be felt more strongly as commuting becomes more firmly established.

Some Social Effects[5]

As regards commuting, the Dunfield Commission stated that ".. socially it would be very desirable; the men would live in their home environment and suffer no family separations".[6] Family life may be expected to improve when heads of families spend more time at home. All members of the community will have more opportunities to become acquainted with and to participate in the various developments and activities of their communities. This particularly applies to local government.

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[5]These points were discussed during an interview with Mr. Harvey Grant, President of The Newfoundland Contractors' Association and Mayor of the Town of Springdale.

[6]Report of the Commission of Enquiry on the Logging Industry, 1960, p. 45.

On the other hand, additional demands will be made on communal organizations to provide entertainment and recreational facilities, especially for single young men. Adult education and vocational training should be introduced into and expanded in logging communities.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Although the forest industries have been declining in relative importance over the past decade, they are vital to the economy of Newfoundland. The most important raw material of the forests is pulpwood, and considerable numbers of the labour force are employed annually in this sector of the industry.

The labourers in logging still experience highly seasonal employment, relatively low annual earnings, a lack of fringe benefits, and, in some cases, difficult working conditions. Wage rates and working conditions have, however, improved considerably over the past ten years or so. Camps are now generally very comfortable, and they are no longer isolated as in the early 1950's.

The number of workers employed in logging has declined in recent years because of mechanization and increased productivity per worker. Higher rates of pay have accompanied the increased productivity, so that the daily earnings of loggers in Newfoundland now compare favourably with those of loggers elsewhere in Eastern Canada. However, the average annual period of employment is brief, and the average annual

income relatively low. The number of man days of work available in any year depends upon the volume of pulpwood to be cut, and since this volume has not changed greatly over the past ten years, the increased daily productivity per logger has tended to reduce both the number of loggers and their average period of employment. The shorter period of employment of loggers is the most important cause of the large disparity between the average annual incomes of loggers and mill workers. Although the seasonality of logging may be largely overcome by mechanical innovations which are making year-round logging more feasible, this will inevitably mean a reduction in the present labour force. While a full-time professional logging force would be advantageous to both employers and employees, large reductions in the work force may not be socially desirable unless alternative employment can be found for the displaced workers, who will otherwise have to be supported by the State. This problem is outside the scope of this thesis, but warrants immediate investigation.

Effects of Commuting

Commuting was first introduced as a policy in 1961, and in 1963 Bowater's had no woods camps engaged in cutting operations on the island of Newfoundland. Since 1961 the A.N.D. Company has steadily increased the percentage of its wood cut by commuters. This technological change has advantages and disadvantages for employers and employees.

Through commuting the companies have effected a

reduction in the delivered cost of wood per cord. Cuts may be taken more quickly under commuting because extra workers may be employed. In addition, commuting may be indirectly contributing to the quality of newsprint, since it helps to ensure that the necessary fresh wood is supplied to the mills. On the other hand, commuting has increased the burden of supervision and administration, as well as the accident frequency among loggers. Records of commuter operations are also more inaccurate than those of camp operations.

The effects of commuting upon loggers' incomes, periods of employment, hours of work, and working conditions have not always been favourable. In addition, the pattern of employment is being altered. Commuting has undoubtedly resulted in some regional unemployment, but the general decrease in the number of man days worked in 1962 and 1963 resulted from lower cuts of pulpwood rather than from commuting. The loggers' questionnaires indicated that the average annual income and period of employment are lower for commuters than for campers. Commuting tends to enlarge the work crews and consequently reduces the average term of employment, while mechanization tends to have the opposite effect. Since mechanization has been proceeding rapidly during the past three years, commuting has probably delayed the reduction of the labour force. It would appear that some of the men displaced by the machines have been able to find employment on the elastic commuter operations.

Commuters have been subject to more difficult working conditions and more irregular working hours than campers. They also appear to lose a greater number of working days for reasons given in Chapter V. It seems that the average commuter spends at least one hour longer per day away from his place of lodging than the average camper. Commuters have travelled by almost every type of conveyance and under varied conditions. Many loggers had to go to these lengths to obtain jobs since there was a relative shortage of employment opportunities in 1962 and 1963. This was partially responsible for some unfavourable comments on commuting. It was felt that the companies were taking advantage of the workers' dilemma in order to get their wood more cheaply.

Shacking is probably the most obvious and undesirable phenomenon attributed to commuting. Since some of the West Coast loggers lived in this manner prior to 1961, Bowater's officials hold that shacking did not result from commuting. While this may be true, it is obvious that commuting has aggravated the problem, which the 1964-1966 Woods Labour Agreement attempts to control. It is reasonably clear that some loggers have endured shacking, as well as difficulties of commuting, because they were desperate for work. It is not clear that the companies anticipated the workers' dilemma and took advantage of it: perhaps in certain cases they employed men who actually were not needed. Prior to introducing commuting, Bowater's determined by survey that

adequate labour was available within fifty miles of their working sites. Since this distance proved to be too great for efficient commuting under most circumstances, some of the men within and without that radius have been dissatisfied. Widespread shacking, however, is a temporary phenomenon. Shacks are unsuitable habitations, and the men will therefore gradually find other employment or move to more central locations.

Centralization

Prior to 1964, the Provincial Government would have assisted the residents of any small, isolated community who wished to move to a more central location. Since it was necessary for all the families in the settlement to sign a petition agreeing to relocate, no single family could receive assistance by itself. There are indications that this policy will be altered in favour of the individual family. Centralization may not be advisable, however, unless the new locations offer better employment opportunities. The number of jobs available in logging will decrease as mechanization is increased and year-round logging becomes more widespread. Therefore, if loggers who move from the outlying areas are to find employment in the woods, the pulpwood industry will have to expand.

Transportation of Men

The costs of commuting are supposed to be borne by the companies. These costs are more stable when using

company buses than when using private cars, because of union pressure for increases in the payments to the owners of private vehicles. The number of private vehicles in use will therefore tend to decline. It is possible that the operators of private buses will enter the commuting business on a commercial basis. Thus the paper companies may hire buses rather than own them. At present company buses are idle for most of the day. Private buses could be used for other commercial purposes when not on hire to the paper companies. The pulpwood industry would then not have to support the entire capital cost of transportation services, and economies may be effected.

Trend of the Industry

According to the A.N.D. Company, commuting is becoming increasingly important in other provinces of Canada, particularly Ontario. It was also suggested that the wood for a new mill on the island of Newfoundland will be cut by commuters. Meanwhile, camps will continue to be used in the more remote areas. Over the past few years cutting has taken place in areas nearest centres of population, thus providing time to build more roads in other districts. Bowater's may open a small number of camps as their wood becomes more inaccessible, but they will never again use camps on the scale that existed before 1961. The A.N.D. Company will also continue to increase the percentage of its pulpwood cut by commuters.

Although the use of camps is declining the loggers who were contacted by mail for this study indicated a strong preference for camps. There are reliable indications that conservatism strongly influenced their decisions in favour of camps, but that loggers will prefer commuting in the future. Although practically all the loggers gave genuine reasons for being dissatisfied with commuting, some of their objections have already been overcome, while others will most likely be removed. Those loggers experiencing very bad commuting conditions will gradually withdraw from the labour force. As mentioned above, this will create a problem of finding new sources of employment. In the short run, commuting has therefore caused some economic and social discomforts for a large section of the woods labour force; in the long run the pulp and paper industry in this province should become more efficient.

APPENDIX A

SOME DETAILED REFERENCE TABLES

TABLE 1

NET VALUE OF COMMODITY PRODUCTION[1] IN NEWFOUNDLAND, BY INDUSTRY, 1949 - 1961

Industry	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
	(annual net value in millions of dollars)												
All commodity production	..	..	..	153.1	159.1	165.4	191.0	212.6	193.2	190.2	210.5	242.7	261.5
Resource industries	..	..	..	98.2	100.0	105.2	124.2	135.4	118.7	106.3	118.2	135.7	137.1
Forest industries, total	39.9	47.6	62.2	59.8	61.9	56.8	58.1	60.5	53.1	51.4	51.4	63.5	60.3
Logging and forest services	15.6	20.8	26.6	21.5	24.9	21.4	24.3	24.0	21.2	20.6	20.7	28.2	20.3
Pulp and paper production	23.2	25.6	34.2	36.4	35.4	34.3	32.7	35.4	30.6	29.7	29.8	34.5	39.2
Sawmilling	1.1	1.2	1.4	1.9	1.6	1.1	1.1	1.1	1.3	1.1	0.9	0.8	0.8
Fishing industries, total	..	..	20.5	17.8	17.1	21.4	23.4	23.4	20.0	17.9	20.5	23.0	23.0
Fishing	..	..	13.5	12.9	12.0	14.7	14.2	15.1	13.7	11.3	14.5	15.9	14.9
Fish processing	..	..	7.0	4.9	5.1	6.7	9.2	8.3	6.3	6.6	6.0	7.1	8.1
Trapping	..	..	..	0.1	0.1	0.1	-	0.2	-	0.1	0.1	0.1	-
Mining	17.4	20.1	25.3	20.5	20.9	26.9	42.7	51.3	45.6	36.9	46.2	49.1	53.8
Secondary manufacturing	8.6	9.9	10.1	12.9	15.6	17.4	17.6	17.8	18.4	20.6	21.1	22.2	21.8
Other commodity production, total	14.9	26.6	27.8	42.1	43.5	42.8	49.2	59.4	56.1	63.3	71.2	84.8	102.6
Electric power 2	1.9	2.2	2.7	3.4	3.9	4.6	6.7	8.4	8.8	9.1	9.5	10.3	10.7
Construction	13.0	24.4	25.1	38.7	39.6	38.2	42.5	51.0	47.3	54.2	61.7	74.5	91.9

.. Not available

- Less than 0.1

Notes: 1. Agricultural production is not included, but it has been estimated at about two per cent of total commodity production.

2. The value of electric power generated by industries for their own use (e.g., by pulp and paper mills) is not included in this item but in that of the industries concerned.

Source: P. Copes, St. John's and Newfoundland, An Economic Survey, p. 153, Table 1.3; and Tables 3 and 4 of this Appendix.

TABLE 2

PERCENTAGES OF THE NET VALUE OF COMMODITY PRODUCTION

IN NEWFOUNDLAND, BY INDUSTRY, 1952 - 1961

Industry	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
All commodity production	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Resource industries	64.2	62.8	63.6	65.0	63.7	61.5	55.9	56.1	55.9	52.4
Forest industries, total	39.0	38.9	34.4	30.4	28.4	27.5	27.0	24.4	26.1	23.1
Logging and forest services	14.1	15.6	12.9	12.7	11.3	11.0	10.8	9.8	11.6	7.7
Pulp and paper production	23.7	22.3	20.8	17.1	16.7	15.8	15.6	14.2	14.2	15.0
Sawmilling	1.2	1.0	0.6	0.6	0.5	0.7	0.6	0.4	0.3	0.3
Fishing industries, total	11.6	10.7	12.9	12.3	11.0	10.3	9.4	9.7	9.5	8.8
Fishing	8.4	7.5	8.9	7.4	7.1	7.1	5.9	6.9	6.5	5.7
Fish processing	3.2	3.2	4.0	4.8	3.9	3.2	3.5	2.8	2.9	3.1
Trapping	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Mining	13.4	13.1	16.2	22.3	24.1	23.6	19.4	22.0	20.2	20.5
Secondary manufacturing	8.4	9.8	10.5	9.2	8.4	9.5	10.8	10.0	9.2	8.3
Other commodity production, total	27.5	27.3	25.9	25.8	28.0	29.0	33.3	33.9	34.9	39.2
Electric power	2.2	2.5	2.8	3.5	4.0	4.6	4.8	4.5	4.3	4.1
Construction	25.2	24.9	23.1	22.3	24.0	24.5	28.5	29.3	30.7	35.1

Source: Calculated from Table 1 of this Appendix.

TABLE 3

NET VALUE OF COMMODITY PRODUCING INDUSTRIES IN NEWFOUNDLAND, 1949-1961

	Forestry		Fisheries		Trapping		Mining		Electric Power		Manufacturing		Construction		Total
	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent	Value
	($000)		($000)		($000)		($000)		($000)		($000)		($000)		($000)
1949	15,597	..	..	..	..	..	17,437	..	1,911	..	32,919	..	13,000	..	..
1950	20,776	..	..	..	..	..	20,124	..	2,199	..	36,712	..	24,400	..	..
1951	26,597	..	13,500	..	..	..	25,295	..	2,688	..	53,690	..	25,100	..	..
1952	21,549	14.1	12,928	8.4	141	0.1	20,515	13.4	3,390	2.2	56,109	36.6	38,700	25.2	153,332
1953	24,884	15.6	12,015	7.6	62	--	20,917	13.1	3,933	2.5	57,785	36.3	39,600	24.9	159,196
1954	21,419	12.9	14,704	8.9	131	0.1	26,879	16.2	4,618	2.8	59,484	36.0	38,200	23.1	165,435
1955	24,295	12.7	14,161	7.4	48	--	42,625	22.3	6,698	3.5	60,587	31.8	42,500	22.3	190,914
1956	23,966	11.3	15,090	7.0	158	0.1	51,332	24.1	8,158	4.0	62,608	29.5	51,000	24.0	212,312
1957	21,220	11.0	13,672	7.1	49	--	45,562	23.6	8,586	4.5	56,544	29.3	47,280	24.5	192,913
1958	20,586	10.8	11,312	5.9	135	0.1	36,855	19.4	9,120	4.8	58,045	30.5	54,178	28.5	190,231
1959	20,659	9.8	14,529	6.9	52	--	46,185	22.0	9,521	4.5	57,755	27.5	61,702	29.3	210,403
1960	28,172	11.6	15,856	6.5	80	--	49,119	20.3	10,338	4.3	64,650	26.6	74,455	30.7	242,670
1961	20,265	7.8	14,922	5.7	46	--	53,753	20.5	10,725	4.1	70,010	26.8	91,916	35.1	261,637

.. Not available

-- Less than 0.1 per cent

Note: 1. Figures for agriculture are not included. This is estimated at 2% of the value of total production.

Source: D.B.S., Survey of Production, 1926-1956, Table 6A; 1960, Table 5; 1961, Table 5.

TABLE 4

NET VALUE OF LEADING INDUSTRIES IN NEWFOUNDLAND, 1957-1961

Industry	1957	1958	1959	1960	1961
Pulp and paper	30,608	29,702	29,784	34,503	39,225
Fish processing	6,266	6,603	5,980	7,133	8,144
Breweries	2,776	3,297	3,801	4,134	3,952
Bread and other bakery products	1,479	1,508	1,617	1,688	1,684
Sash, door and planing mills	1,006	2,080	1,002	797	679
Sawmills	1,306	1,123	872	764	826
Carbonated beverages	1,498	1,727	2,213	2,380	2,132
Printing and publishing	1,596	768	1,673	1,778	1,649
Biscuits	832	752	735	715	..
Concrete products	..	492	346	..	..
Other leading industries	4,738	5,509	6,043	6,239	6,167
Total, leading industries	55,105	53,561	54,067	60,132	64,459
Total, all industries	56,544	58,045	57,755	64,650	70,010

.. Not available

Source: D.B.S., General Review of the Manufacturing Industries of Canada, 1957 to 1960, Part II, Section 2, Table 5, and 1961, Section B, subsection 2, Table 5.

TABLE 5

PULPWOOD PRODUCTION AND INVENTORIES IN NEWFOUNDLAND,

JANUARY 1958 - MAY 1964

	Month	Production during month (rough cords)	Inventory at end of month (rough cords)
1958	J	10,611	1,237,194
	F	9,611	1,195,062
	M	41,606	1,169,242
	A	33,558	1,138,514
	M	76,172	1,170,185
	J	130,715	1,253,873
	J	128,458	1,313,308
	A	80,739	1,325,004
	S	40,979	1,294,594
	O	44,742	1,262,943
	N	67,280	1,227,929
	D	8,880	1,183,093
1959	J	4,780	1,139,575
	F	18,449	1,115,329
	M	15,145	1,086,614
	A	12,690	1,052,022
	M	20,219	1,014,424
	J	82,769	1,047,860
	J	86,539	1,058,087
	A	57,361	1,031,485
	S	110,836	1,064,507
	O	147,309	1,132,874
	N	114,246	1,179,758
	D	93,341	1,226,658
1960	J	30,919	1,194,193
	F	29,513	1,157,984
	M	31,232	1,125,705
	A	27,419	1,089,365
	M	44,272	1,068,661
	J	160,257	1,161,991

Table 5 (Cont'd)

Month		Production during month (rough cords)	Inventory at end of month (rough cords)
1960	J	139,984	1,226,281
	A	82,071	1,227,253
	S	152,086	1,303,331
	O	160,619	1,382,525
	N	122,062	1,441,140
	D	65,557	1,438,640
1961	J	15,851	1,384,593
	F	7,657	1,327,739
	M	151	1,262,419
	A	6,129	1,199,338
	M	20,894	1,146,241
	J	107,918	1,170,729
	J	61,682	1,156,840
	A	6,727	1,080,047
	S	68,221	1,067,530
	O	227,913	1,223,190
	N	184,084	1,317,000
	D	70,449	1,305,626
1962	J	19,232	1,263,167
	F	16,326	1,214,598
	M	21,090	1,167,455
	A	12,962	1,117,474
	M	16,608	1,063,860
	J	91,666	1,084,549
	J	60,402	1,078,353
	A	42,355	1,039,496
	S	77,939	1,047,412
	O	126,788	1,137,318
	N	33,649	1,066,181
	D	37,794	1,050,790

Table 5 (Cont'd)

Month		Production during month (rough cords)	Inventory at end of month (rough cords)
1963	J	11,412	988,884
	F	21,257	956,172
	M	16,657	909,742
	A	14,152	865,992
	M	32,156	826,566
	J	78,212	798,527
	J	92,012	820,214
	A	69,760	804,359
	S	85,615	802,706
	O	118,607	832,744
	N	112,974	863,418
	D	73,198	870,721
1964	J	35,796	793,804
	F	54,719	776,726
	M	55,042	758,400
	A	39,799	728,302
	M	34,572	698,953

Source: D.B.S., Pulpwood Production, Consumption, and Inventories, January 1958 - May 1964, Tables 1 and 3.

TABLE 6

EMPLOYMENT IN FORESTRY (CHIEFLY LOGGING)
AND IN PULP AND PAPER MILLS IN NEWFOUNDLAND,
JANUARY 1959 - APRIL 1964[1]

Year	Month	Forestry	Pulp and paper mills
1959	J	2,591	3,087
	F	2,282	3,094
	M	2,712	3,091
	A	2,380	3,274
	M	2,023	3,225
	J	4,178	3,378
	J	4,784	3,326
	A	4,470	3,528
	S	5,069	3,371
	O	5,501	3,382
	N	4,967	3,279
	D	3,905	3,258
1960	J	4,680	3,176
	F	4,494	2,983
	M	3,385	3,142
	A	2,244[2]	3,069[2]
	M	3,349	3,325
	J	6,922	3,414
	J	7,421	3,389
	A	6,748	3,486
	S	7,236	3,330
	O	7,979	3,272
	N	7,326	3,228
	D	5,414	3,225
1961	J	5,639	3,128
	F	4,949	3,145
	M	2,957	3,110
	A	2,134	3,172
	M	2,055	3,328
	J	5,166	3,353
	J	5,705	3,418
	A	3,705	3,407
	S	4,922	3,420
	O	9,322	3,317
	N	7,849	3,247
	D	5,242	3,294

Table 6 (Cont'd)

Year	Month	Forestry	Pulp and paper mills
1962	J	5,088	3,164
	F	4,763	3,031
	M	3,296	3,212
	A	2,736	3,130
	M	2,640	3,198
	J	4,719	3,178
	J	4,595	3,112
	A	3,626	3,117
	S	4,649	3,197
	O	4,639	2,931
	N	2,982	2,941
	D	2,365	3,007
1963	J	2,392	2,891
	F	1,867	2,832
	M	1,371	2,701
	A	1,242	2,888
	M	1,278	2,937
	J	3,907	2,977
	J	4,254	3,052
	A	3,966	3,102
	S	4,788	3,018
	O	5,208	3,015
	N	4,803	2,926
	D	3,790	3,013
1964	J	3,565	2,898
	F	3,764	2,881
	M	2,967	2,951
	A	2,727	2,883

Notes: 1. Coverage by D.B.S. limited to firms having 15 or more employees. Figures above are therefore applicable for only a few employers in Nfld. other than the two paper companies.

2. Estimated by averaging figures for April in other years given.

Source: D.B.S., Employment and Payrolls, January 1959 to April 1964, Table 5.

TABLE 7

AVERAGE WEEKLY WAGES AND SALARIES FOR FORESTRY (CHIEFLY LOGGING) AND FOR PULP AND PAPER MILLS, FOR SELECTED PROVINCES, JANUARY 1959 - APRIL 1964.

	Month	Newfoundland		New Brunswick		Quebec		Ontario		British Columbia	
		Forestry	Pulp & paper mills	Forestry	Pulp & paper mills	Forestry	Pulp & paper mills	Forestry	Pulp & paper mills	Forestry	Pulp & paper mills
1959	J	$ 59.27	$ 97.78	$ 49.87	$ 88.33	$ 56.64	$ 90.83	$ 86.92	$ 94.09	$ 84.36	$101.17
	F	60.78	113.53	58.31	88.99	57.12	92.88	90.27	95.78	91.05	96.87
	M	59.21	103.94	57.24	87.58	61.81	91.36	85.62	94.28	92.71	96.78
	A	62.63	94.67	58.41	92.02	62.79	91.22	79.29	93.84	97.82	98.11
	M	59.22	99.49	50.41	92.09	50.94	93.94	78.01	94.03	102.06	105.01
	J	71.88	101.40	45.47	89.49	58.83	94.51	80.27	94.02	99.51	101.28
	J	69.98	104.71	60.92	89.57	60.44	92.56	88.83	94.63	95.70	100.99
	A	68.84	98.74	64.51	90.44	54.87	93.40	94.95	93.81	93.67	104.34
	S	67.79	97.75	61.66	89.75	56.31	93.08	95.85	94.02	96.52	103.92
	O	70.77	99.62	59.22	88.27	59.48	94.25	89.73	95.61	108.23	105.35
	N	64.03	102.50	61.50	92.89	59.36	95.47	93.26	97.26	103.97	103.21
	D	56.64	104.38	66.76	89.23	62.87	93.23	87.33	94.84	85.12	103.76
1960	J	63.17	102.49	57.72	91.04	58.92	94.70	88.48	96.38	91.49	102.10
	F	73.31	103.34	54.53	93.20	56.30	94.42	93.03	97.42	98.60	105.82
	M	64.68	104.51	51.27	93.01	60.46	94.61	80.98	95.77	93.42	106.41
	A	60.47	106.94	61.99	94.87	68.40	95.62	84.01	96.08	104.80	100.99
	M	64.80	102.51	48.97	92.66	48.71	95.43	78.22	96.32	101.99	102.15
	J	70.25	104.14	53.96	91.97	60.79	98.63	82.81	98.02	104.08	105.17
	J	70.57	109.72	61.15	92.77	61.96	99.92	88.27	98.95	91.08	108.02
	A	66.83	106.94	63.19	90.36	61.98	98.38	91.84	97.75	86.72	102.69
	S	76.70	109.71	59.78	92.54	61.52	100.27	93.43	99.60	108.02	109.34
	O	78.59	110.09	61.37	91.64	62.88	99.64	97.38	101.04	111.41	108.96
	N	73.64	112.74	71.21	92.13	64.62	100.75	93.57	103.40	106.27	110.10
	D	66.75	122.08	72.44	99.96	67.53	98.96	90.42	102.07	90.06	100.61
1961	J	77.05	112.61	53.39	96.18	62.00	100.18	96.35	102.00	95.53	111.31
	F	79.04	110.95	59.30	91.78	62.60	102.71	104.20	102.84	100.00	109.13
	M	74.15	112.09	62.89	91.14	60.67	101.20	85.50	101.35	99.50	109.76
	A	72.29	119.68	64.81	100.76	72.08	104.19	75.46	102.00	111.61	109.17
	M	73.89	112.27	54.99	88.98	50.26	100.33	80.65	102.44	106.74	108.17
	J	81.39	115.90	55.07	93.77	58.65	100.43	89.78	102.08	101.89	108.05
	J	81.48	110.25	51.19	94.83	62.36	101.29	96.79	101.76	85.34	105.39
	A	77.76	115.29	56.04	90.95	63.52	101.84	95.16	101.65	83.54	105.38
	S	75.84	109.07	51.55	100.01	58.88	102.43	94.52	102.83	109.30	106.00
	O	84.54	110.94	55.33	98.33	66.10	103.41	96.17	104.17	108.23	109.31
	N	87.33	112.80	62.63	102.25	67.16	104.16	95.03	104.51	105.06	108.81
	D	80.35	122.93	64.73	99.61	69.35	105.31	92.09	103.69	86.37	102.56

Table 7 (Cont'd)

	Month	Newfoundland		New Brunswick		Quebec		Ontario		British Columbia	
		Forestry	Pulp & paper mills	Forestry	Pulp & paper mills	Forestry	Pulp & paper mills	Forestry	Pulp & paper mills	Forestry	Pulp & paper mills
1962	J	$ 80.13	$114.70	$ 61.73	$ 94.27	$ 59.38	$104.64	$ 88.88	$104.25	$101.57	$110.68
	F	78.78	113.85	64.00	101.55	66.76	102.98	99.65	104.20	105.56	110.34
	M	75.15	119.30	59.80	98.80	67.49	104.17	88.90	104.57	107.78	108.13
	A	74.06	114.75	59.64	98.74	74.61	102.56	93.43	105.18	111.35	106.34
	M	75.16	113.57	56.46	97.49	56.70	105.32	85.80	105.93	109.46	105.74
	J	81.41	113.91	63.86	100.09	61.27	108.53	89.68	105.91	110.44	106.77
	J	82.88	117.17	60.29	102.27	64.35	105.90	100.14	105.96	109.61	108.65
	A	82.73	114.45	64.34	98.57	66.93	104.94	96.06	104.99	102.59	109.55
	S	82.52	111.46	61.32	98.58	66.31	106.71	99.70	107.89	113.97	112.53
	O	84.27	114.58	61.88	99.80	70.51	107.92	98.88	107.87	111.98	113.81
	N	79.18	112.11	62.25	100.65	76.32	106.82	101.70	107.43	107.79	113.03
	D	77.65	129.21	65.38	102.24	73.43	105.59	90.63	105.91	89.65	109.51
1963	J	76.29	114.24	56.47	96.59	65.13	105.18	84.64	106.32	100.42	110.54
	F	77.56	106.24	61.94	99.80	73.05	105.94	96.08	107.17	110.51	110.96
	M	77.35	113.84	66.47	102.10	73.20	105.85	90.11	106.95	113.19	114.30
	A	77.62	115.18	70.06	102.68	75.95	109.37	91.97	108.57	111.51	113.07
	M	81.12	118.34	59.07	101.98	62.34	109.13	76.85	108.20	110.49	113.60
	J	86.82	125.84	67.28	101.88	68.80	110.02	90.11	107.61	119.44	112.34
	J	83.22	120.29	69.98	101.06	71.99	108.47	96.69	108.34	110.50	112.51
	A	80.14	126.00	65.03	101.48	70.81	109.52	95.41	107.77	107.53	112.14
	S	81.96	119.35	67.17	105.86	85.44	110.99	101.01	108.00	113.16	116.34
	O	85.85	116.80	70.45	102.23	86.75	111.22	101.20	108.88	110.69	118.08
	N	86.23	116.55	70.90	103.03	87.17	112.59	97.12	110.73	112.85	117.92
	D	85.43	133.31	71.11	106.80	89.95	113.65	87.97	110.51	92.59	115.14
1964	J	84.37	115.32	67.14	103.56	80.94	110.72	93.34	108.88	96.50	117.51
	F	80.42	117.13	72.53	101.05	84.27	110.75	106.08	109.68	113.66	119.38
	M	78.73	118.72	66.29	100.09	91.84	112.32	107.63	110.00	112.58	118.98
	A	79.66	118.47	68.41	109.71	87.37	113.61	93.02	109.43	116.50	118.38

Source: D.B.S., Employment and Payrolls, January 1959 - April 1964, Table 5.

TABLE 8

INDEXES OF PULPWOOD PRODUCTION AND INVENTORIES, JANUARY 1958 - MAY 1964, AND OF EMPLOYMENT AND AVERAGE WEEKLY WAGES IN FORESTRY, JANUARY 1959 - APRIL 1964, FOR NEWFOUNDLAND

(1959 - 1963 = 100)

Month		Pulpwood production	Pulpwood inventories	Employment	Average weekly wages
1958	J	16.4	112.0	..	..
	F	14.9	108.2	..	..
	M	64.4	105.8	..	..
	A	51.9	103.1	..	..
	M	117.8	105.9	..	..
	J	202.2	113.5	..	..
	J	198.7	118.9	..	..
	A	124.9	119.9	..	..
	S	63.4	117.2	..	..
	O	69.2	114.3	..	..
	N	104.1	111.2	..	..
	D	13.7	107.1	..	..
1959	J	7.4	103.2	60.6	79.4
	F	28.5	101.0	53.3	81.4
	M	23.4	98.4	63.4	79.3
	A	19.6	95.2	55.6	83.9
	M	31.3	91.8	47.3	79.3
	J	128.1	94.7	97.7	96.3
	J	133.9	95.8	111.8	93.7
	A	88.7	93.4	104.5	92.2
	S	171.5	96.4	118.5	90.8
	O	227.9	102.6	128.6	94.8
	N	176.8	106.8	116.1	85.8
	D	144.4	111.0	91.3	75.9
1960	J	47.8	108.1	109.4	84.6
	F	45.7	104.8	105.0	98.2
	M	48.3	101.9	79.1	86.6
	A	42.4	98.6	52.5	81.0
	M	68.5	96.7	78.3	86.8
	J	247.9	105.2	161.8	94.1
	J	216.6	111.0	173.5	94.5

TABLE 8 (Cont'd)

	Month	Pulpwood production	Pulpwood inventories	Employment	Average weekly wages
1960	A	127.0	111.1	157.7	89.5
	S	235.3	118.0	169.1	102.7
	O	248.5	125.2	186.5	105.3
	N	138.8	130.5	171.2	98.6
	D	101.4	130.2	126.6	89.4
1961	J	24.5	125.3	131.8	103.2
	F	11.8	120.2	115.7	105.9
	M	0.2	114.3	69.1	99.3
	A	9.5	108.6	49.9	96.8
	M	32.3	103.8	48.0	99.0
	J	167.0	106.0	120.8	109.0
	J	95.4	104.7	133.4	109.1
	A	10.4	97.8	86.6	104.2
	S	105.5	96.6	115.1	101.6
	O	368.1	110.7	217.9	113.2
	N	284.8	119.2	183.5	117.0
	D	109.0	118.2	122.5	107.6
1962	J	29.8	114.4	118.9	107.3
	F	25.3	110.0	111.3	105.5
	M	32.6	105.7	77.0	100.7
	A	20.1	101.2	64.0	99.2
	M	25.7	96.3	61.7	100.7
	J	141.8	98.2	110.3	109.0
	J	93.4	97.6	107.4	111.0
	A	65.5	94.1	84.8	110.8
	S	120.6	94.8	108.7	110.5
	O	196.2	103.0	108.4	112.9
	N	52.1	96.5	69.7	106.1
	D	58.7	95.1	55.3	104.0
1963	J	17.7	89.5	55.9	102.2
	F	32.9	86.6	43.6	103.9
	M	25.8	82.4	32.0	103.6
	A	21.9	78.4	29.0	104.0

TABLE 8 (Cont'd)

	Month	Pulpwood production	Pulpwood inventories	Employment	Average weekly wages
1963	M	49.7	74.8	29.9	108.7
	J	121.0	72.3	91.3	116.3
	J	142.4	74.3	99.4	111.5
	A	107.9	72.8	92.7	107.3
	S	132.5	72.7	111.9	109.8
	O	183.5	75.4	121.7	115.0
	N	174.8	78.2	112.3	115.5
	D	113.2	78.8	88.6	114.4
1964	J	55.4	71.9	83.3	113.0
	F	84.7	70.3	88.0	107.7
	M	85.2	68.7	69.4	105.5
	A	61.6	65.9	63.7	106.7
	M	53.5	63.3	..	..

.. Not available

Source: Calculated from Tables 5, 6, and 7 of this Appendix.

TABLE 9

AMOUNTS AND PERCENTAGES BY WHICH ANNUAL AVERAGE WEEKLY WAGES AND SALARIES IN PULP AND PAPER MILLS EXCEEDED THOSE IN FORESTRY, FOR SELECTED PROVINCES, 1951 - 1963

Year	Newfoundland		New Brunswick		Quebec		Ontario		British Columbia	
	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent
1951	$25.89	57.9	$26.15	64.5	$24.56	55.4	$20.15	40.7	$ 2.94	4.7
1952	27.08	54.8	21.38	44.5	21.46	42.3	14.07	24.6	3.27	4.5
1953	24.49	46.0	21.92	45.1	22.05	41.5	15.27	25.8	4.03	5.4
1954	29.73	56.5	20.67	40.1	22.94	42.7	14.63	23.3	8.18	10.7
1955	33.46	65.8	27.18	55.8	23.68	42.8	16.13	24.7	9.65	12.4
1956	33.89	60.7	24.32	43.4	24.98	42.0	12.78	17.5	9.20	11.2
1957	40.06	63.4	23.35	40.0	24.94	39.6	9.99	12.6	7.20	8.4
1958	30.09	45.9	26.50	45.8	26.25	41.9	6.25	7.3	11.41	13.1
1959	37.29	58.0	32.03	55.4	34.61	59.2	7.15	8.2	5.84	6.1
1960	38.78	56.1	33.21	55.5	36.44	59.6	10.03	11.3	6.20	6.3
1961	34.97	44.4	38.06	66.0	39.49	62.9	10.80	11.8	8.32	8.4
1962	36.27	45.6	37.67	61.0	38.51	57.5	11.39	12.1	2.78	2.6
1963	36.37	44.6	35.79	54.0	33.45	44.1	15.82	17.1	4.50	4.1

Source: Calculated from Table 20.

APPENDIX B

THE SAMPLING PROCEDURES AND SOME REFERENCE TABLES

The Selection of a Sample

The population of Newfoundland loggers from which the sample was drawn consisted of the membership of Local 2564 of the United Brotherhood of Carpenters and Joiners of America at Grand Falls, as of February 1963. The list was taken from the Cardex files of the union, as no published list was available.

This population was stratified by the nine Census Divisions in the island of Newfoundland. This stratification was used because Divisions 1, 2, and 3 were expected to contain mostly campers, Divisions 4, 5, and 9 mostly commuters, while both groups would be found in Divisions 6, 7, and 8. The results could then be analysed by geographical area if desired, and comparisons could be made to data published in the Census. A systematic stratified sample was drawn by selecting every tenth name in each Division, beginning each time with a random number.

Testing of the Questionnaire

Twenty questionnaires were mailed to loggers in March 1964. Eleven were completed and returned. Only minor changes were made in the questionnaire after analysing the replies.

Preparation and Mailing

With the co-operation of the Forestry Division of the Department of Mines, Agriculture and Resources, 457 questionnaires, with covering letters and self-addressed, stamped return envelopes, were mailed on May 13, 1964. A second mailing to those who had not replied was carried out in mid-June. This was immediately preceded by a letter from the Chief Forester of the Province. It was felt that such a letter would elicit a greater response since those loggers who had replied had suggested almost unanimously that government action would be necessary to alter certain matters as regards commuting. This Appendix contains a copy of the questionnaire and samples of the other correspondence.

Reliability of the Sample

The loggers returned almost fifty per cent of the questionnaires. This return was not large enough to be considered unquestionably representative of the whole population, unless it could be shown that the non-responses did not differ significantly from those that had responded. The testing of the non-responses was not feasible, and the sample is therefore subject to some question. Accordingly, the analysis has not been extended to the entire population.

Student's t-test for Unpaired Variates

The average income of campers was $1,899.31, and that of commuters was $1,429.15. The question is whether this difference is real or due to chance factors only; that is,

is there sufficient reason to believe that campers and commuters actually do receive differing average incomes?

A test procedure was established to determine the probability of observing a difference as large as that noted, given the hypothesis that there is no real difference. A t-test for unpaired variates is used under the assumption that there is no real difference between the variation within the two groups. Using the following data, a variance ratio test indicates that this assumption is reasonable:

> The sample variance for campers is 968534.13, with 69 degrees of freedom;
>
> The sample variance for commuters is 771725.55, with 116 degrees of freedom.

Having established an hypothesis that no real difference exists between the means of the population from which the campers and commuters were drawn, a value of Student's t with 185 degrees of freedom equalling 3.27 was obtained. The probability of obtaining a value of t this large is less than 0.01. In other words, the difference noted is too large to be reasonably considered due to chance alone. The conclusion is that there is good reason to believe that campers and commuters do exhibit a real difference in average incomes.

Memorial University,
St. John's, Newfoundland,
May 6, 1964.

Dear Sir:

Enclosed you will find a list of questions. We would be very much obliged if you would answer these and return them in the stamped and addressed envelope enclosed.

Here at Memorial University we are trying to find out how the doing away with woods camps is affecting Newfoundland, and especially you who work in the woods. Obviously the best way of finding out if this is good or bad for you is to ask you directly.

This list of questions is fairly long, but we have tried to make them as easy as possible to answer. For many of them you have only to put a check mark in the blank or answer "yes" or "no". You may have to make a reasonable guess at some figures, but others you will know off-hand. There are a few questions where you are given a chance to speak your mind and you should do just that. Say whatever you feel is right. There may be questions you can't answer, but please answer as many as you can. When you don't know exact figures, go as close as you can.

It is very important that you fill out these forms. The information you give us will become part of a report which we hope to publish. We haven't been able to send forms to every logger, so we have picked so many from every place. This report can only be of benefit to you and your community if you answer these questions.

....

You can feel completely free in answering all of these questions. All personal information will be held in strictest confidence by Memorial University. In fact, you don't have to fill in your name if you don't want to do it.

Please return these forms as quickly as possible. Your co-operation is gratefully appreciated.

Yours sincerely,

R.D. Peters

R.D. PETERS

c/o Economics Department,
Memorial University of Nfld.

May 27, 1964

Dear Sir:

Two weeks ago a list of questions was mailed to you, along with a letter explaining what it was all about. We had hoped that you would kindly fill it in and return it in the envelope which was sent with it.

We have not yet received a reply from you, so we are sending you another copy in case you did not receive the first one or you have mislaid it. If you have already sent it in, you don't need to fill in this one.

Since you may not have received the first letter, we will briefly explain what we are trying to do. We are making a study of how the doing away with woods camps is affecting Newfoundland, especially the loggers. By filling out these forms you will be letting us know how the loggers feel about this change. This is why it is important for you to answer these questions and return them as soon as possible.

Please accept our thanks for your kind cooperation. Without the help of the loggers this study would not have been possible.

Yours sincerely,

R.D. Peters

R.D. Peters
c/o Economics Department
Memorial University of Newfoundland

PROVINCE OF NEWFOUNDLAND

NO. _____

In reply please quote the above number and the date of this letter.

DEPARTMENT OF MINES, AGRICULTURE AND RESOURCES

ST. JOHN'S

June 16, 1964.

Dear Sir:

We have been wondering for some time what effect the closing of logging camps is having on the welfare and earnings of Newfoundland loggers.

A study is currently in progress at Memorial University to determine the answers to these questions.

It is vitally important that as many loggers as possible fill in the forms already sent out by the University. A cross section of opinions is being requested. They are interested only in knowing the facts, therefore, if you so desire, it is not necessary to sign your name.

Since forms were sent to only ten percent of the loggers, your failure to complete the forms will indicate non-interest on the part of at least ten loggers.

May I personally request your co-operation and help in the study.

Yours truly,

E.B. Ralph,
Chief Forester.

Page 1

Survey Period - Year 1963

A. To be completed for each person receiving this questionnaire.

(1) Name _____ (3) Age _____

(2) Address _____ (4) Married ___Single__Other ___

_____ (5) How many dependents _____
(Including wife)

(6) How long have you been at present address? less than one year ____; one to three years ___; three to five years ____; over five years _____.

(7) If you have moved, give previous address _____

(8) If you have changed your address within the past five years, did you move because you wanted to be closer to your employment?

Yes _____ No _____ Partly _____

(9) Do you (a) own your own home _____ If yes, give Value of house $ _____ Value of land $ _____

(b) live with your parents _____
(c) board _____Rate _____
(d) Rent _____? Rate _____ (check one)

(10) Do you own a vehicle of any type, for example, car, truck, jeep?

Yes _____ No _____
If yes, give year and make _____

(11) Check your main reason for having a vehicle, if you have one.

(a) going back and forth to work _____
(b) other _____

(12) If you own your own vehicle for <u>mainly other reasons</u>, do you use it <u>at all</u> for transportation to and from your woods work?

Yes _____ No _____

(13) How long did you spend working in the woods last year?

_____ months _____ weeks

(14) If less than 12 months, how much of the rest of the year were you

(a) unemployed _____ months
(b) working elsewhere ____ months

(15) Employer - A.N.D. _____ Contractor's Name _____
Bowaters _____ Contractor's Name _____

(If you had more than one employer in the woods, give main one)

(16) In which area were you working? _____

(17) Miles from home _____

(18) Did the employer run a camp on the job? Yes___ No ____

(19) Did you (a) live in a company camp _____
(b) go home every night _____
(c) have a cabin in a town near your work _____
(d) have your own camp or shack in the woods _____
(e) board in a town near your work ____

(20) If you boarded in a town near your work, how much did you pay per month?

B. To be completed <u>only for those who went back and forth to work each day</u>.

(1) How many miles, one way, did you have to go to work?
_____

(2) Cost per day _____ Company allowance _____

Travelled by car, bus, or truck? _____

(3) What time did you have to leave home (or place of lodging) in the mornings? _____ o'clock.

(4) Travelling time, one way, about _____.

(5) Hours per day actually at work in the woods _____hours.

(6) What time did you usually finish in the evenings?
_____ o'clock.

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(7) Total hours from time you left home in the mornings until you arrived in the evenings? _____ hours.

(8) How many working days did you lose during last year because of:

(a) sickness _____ days
(b) rain _____ "
(c) snow _____ "
(d) car breakdown ___ "
(e) saw breakdown ___ "
(f) bad roads _____ "
(g) other equipment breakdowns ____ "
(h) other reasons ___ "

(9) Would you have lost as many days if you had lived in the camp? More _____ Less _____ Just as many ____
Why? _____

_____

_____

(10) Please give the following summary of your income earned in the woods last year.

(a) Total number of scales _____
(b) Total days worked _____
(c) Gross earnings $ _____
(d) Total deductions _____
(e) Net earnings (take-home pay) $ _____
(f) Average take-home pay $ _____ per day.

To fill in the above information all you have to do is add up the figures off your last year's time slips. If you can't find them, guess the figures as close as you can.

(11) Would you want more or less money if you lived in a camp?

More _____ Less _____ The same _____

(12) How much more or less per day? _____

(13) Why? _____

_____

_____

(14) Would you rather be working from a camp? Yes___ No ___

(15) Why or why not?_____

_____

_____

C. To be completed only for those working from camps.

(1) Distance from home, one way _____ miles.

(2) How often did you go home? _____

(3) Cost per trip, one way $ _____

(4) What time did you leave the camp in the mornings? _____ o'clock

(5) How many hours did you spend actually at work in the woods each day? _____ hours.

(6) What time did you usually get back to the camp in the evenings? _____ o'clock.

(7) Rate of board per day $ _____

(8) How many working days did you lose during last year because of:

(a) sickness	_____	days
(b) rain	_____	"
(c) snow	_____	"
(d) car breakdown	_____	"
(e) power saw failure	_____	"
(f) bad roads	_____	
(g) other equipment breakdown	_____	"
(h) unable to drive wood	_____	"
(i) other reasons	_____	"

(9) Please give the following summary of your income earned in the woods last year.

(a) total number of scales	_____	
(b) total days worked	_____	
(c) gross earning	$ _____	
(d) total deductions	_____	
(e) net earnings (take-home pay)	$ _____	
(f) average take-home pay	$ _____	per day.

To fill in the above information, all you have to do is add up the figures off your last year's time slips. If you can't find them, guess the figures as close as you can.

(10) Would you be able to work where you worked last year if there were no camp there? Yes _____ No _____

(11) If yes, how would you manage it? _____

_____

(12) Would you rather there were no camps there? Yes__ No__

(13) Why or why not? _____

_____

_____

(14) Would you want more or less money if you were going back and forth to work each day? _____

(15) How much more or less per day ? _____

(16) Why? _____

_____

_____

D. This section to be completed <u>only for those who own vehicles and who use them to go back and forth to work, daily or on weekends</u>.

(1) How far, one way, did you go to work last year? ___Miles

(2) Number of men carried with you _____ men each trip.

(3) What did you charge per man per trip, one way? _____

(4) Did you cover your expenses this way? Yes___ No ___

(5) How much should you have charged in order to break even?

_____ per man per trip, one way.

(6) How many trips, one way, would you make in the average month? _____ trips.

(7) Give figures as close as possible for your expenses.

Gas and Oil $ _____ per day.
Repairs $ _____ per month
Licenses, Depreciation, etc. $ _____ per year.

E. GENERAL - To be answered by everyone.

(1) Generally speaking, do you agree with the doing away with woods camps? Yes _____ No _____

(2) What points are there in favour of doing away with camps?

(1) _____

(2) _____

(3) _____

(4) _____

(3) What points are there against doing away with camps?

(1) _____

(2) _____

(3) _____

(4) _____

(4) Do you think we will ever have a situation in which there are no camps and everyone travels back and forth to work? Why or why not?

_____

_____

_____

(5) What do you feel should be done about this whole situation?

_____

_____

_____

_____

Please fill in the following. If you don't know exact figures, go as close as you can. You may have given some of these figures before in this questionnaire, but please fill them in again here.

1. EARNED INCOME

Source	Number of months	Amount per month before any deductions	Total
Woods work	_____	$_____	$___
Fishing	_____	_____	___
Farming	_____	_____	___
Mines or survey	_____	_____	___
Government	_____	_____	___
Town Councils	_____	_____	___
Other work	_____	_____	___
Sub-total			$___

2. How much money did you receive from the following sources?

Unemployment Insurance
No. of weeks _____ Amt. per week $ ___ ___

Workmen's Compensation
No. of weeks _____ Amt. per week $ ___ ___

$_____

3. Estimated value of non-cash income; that is, how much would you say each of the following was worth to you?

Own vegetables	$_____
Own firewood	$_____
Own meat and fish	_____
Other (describe)	_____

TOTAL $ _____

The following tables derived from the loggers' questionnaires did not yield sufficient information to warrant their inclusion in the text. They are included here merely as reference matter.

TABLE 1

DISTRIBUTION OF 50 CAMPERS AND 81 COMMUTERS BY NUMBER OF CHILDREN IN FAMILY, 1963

Number of children	Campers	Commuters
0	7	5
1	14	9
2	10	11
3	6	11
4	4	12
5	4	13
6	1	6
7	2	5
8	1	4
9	0	2
10	0	1
11	0	2
12	1	0
13 or more	0	0
Total	50	81

TABLE 2

AGE DISTRIBUTION OF VEHICLES POSSESSED BY 22 CAMPERS AND 47 COMMUTERS, 1963

Model year	Campers		Commuters		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
1963	2	9.1	4	8.5	6	8.7
1962	2	9.1	4	8.5	6	8.7
1961	4	18.2	2	4.3	6	8.7
1960	4	18.2	3	6.4	7	10.1
1959	1	4.5	9	19.2	10	14.5
1958	1	4.5	5	10.6	6	8.7
1957	5	22.8	5	10.6	10	14.5
1956	2	9.1	5	10.6	7	10.1
1955	1	4.5	4	8.5	5	7.3
1954 and older	0	0.0	6	12.8	6	8.7
Total	22	100.0	47	100.0	69	100.0

TABLE 3

DISTRIBUTION OF 71 CAMPERS BY DISTANCE FROM HOMES TO JOB SITES, 1963

Distance in miles	Number	Per cent
0 - 49	4	5.6
50 - 99	12	16.9
100 - 149	15	21.1
150 - 199	9	12.7
200 and over	31	43.7
Total	71	100.0

TABLE 4

AVERAGE NUMBER OF DAYS LOST PER MAN[1] FOR VARIOUS REASONS BY SEVENTEEN LOGGERS WHO WORKED UNDER TWO SYSTEMS IN 1963

Cause of lost time	Camping	Commuting
Sickness	3.2	4.5
Rain	7.0	9.3
Snow	4.0	8.5
Car failure	3.0	3.7
Power saw failure	2.5	3.3
Bad roads	1.0	2.0
Other equipment failure	-	-
Other reasons	-	-

Note: 1. Calculated on the basis of the number of men losing time for each reason, and not on the basis of the total seventeen loggers.

APPENDIX C

EXTRACTS FROM THE 1964-1966 WOODS

LABOUR AGREEMENT

Article X - Working and Living Conditions

10.15 The Employers agree that there shall be no shacking or batching on their woods operations except by mutual agreement between the parties and under conditions mutually agreed to before any shacking and batching commences.

10.16 It is agreed that the Employer will maintain good conditions in respect to cleanliness, sanitation and health and it is the duty of the employees to co-operate in this regard. Employees living and service quarters will be washed and disinfected at least once each week, and the Employer will continue to provide improved camp facilities.

It is agreed that during the life of this Agreement, a start will be made on providing inside toilet facilities. It is mutually agreed that inside urinals are highly desirable.

10.17 Where beds are separated by partitions, space between such beds shall be approximately three (3) feet. Beds not separated by partitions shall not be less than twenty-four (24) inches apart. All beds and mattresses shall be of a good quality and in a serviceable condition at all times.

10.18 All camps shall be of smooth wall construction inside. All camps shall be maintained in such a manner as not to be drafty during winter months and to keep out pests during the summer.

10.19 All camps shall be properly lighted and it is agreed that flat wick lamps are inadequate for proper lighting. All camps of a permanent or semi-permanent nature shall have electric lighting. Where practical, painting will be done to aid in the above desirable condition.

Article X - Working and Living Conditions Cont'd

10.20 By May 1, 1965 all camps shall have separated proper washing facilities including showers and proper facilities for washing clothes with an adequate supply of hot and cold water. The Employer will provide washing machines for the use of cookery personnel.

10.21 All camps shall have separate drying rooms adequate to the extent that it will not be necessary for employees to have wearing apparel and/or footwear drying in their sleeping quarters.

10.22 Sufficient space, and tables and chairs to accommodate approximately half the men shall be provided in each bunkhouse, unless a separate recreation room is provided.

10.23 All bunkhouses will be supplied with water coolers and paper drinking cups except where drinking fountains are provided in the bunkhouse.

10.24 The Employer will provide a T.V. set for the use of the Camp where T.V. is available. Radios will also be provided but if it is found that Radios or T.V.'s are being improperly treated the Employer may refuse to have them repaired.

Article XII - Seniority

12.01 The Employers recognize the principle of seniority. During the term of this Agreement the Employers in co-operation with the Union will endeavour to work out a satisfactory method of applying seniority principles so that in recalls, rehiring, lay-offs, promotion and transfers, seniority will receive due consideration subject to reasonable consideration of skill, efficiency, and ability.

12.02 In recalls, hiring, rehiring, lay-offs, promotions or transfers and subject to full consideration of skill, efficiency and ability, union members shall at all times receive preference over non-union men.

Article XVI - Commuting

16.01 A Commuter for the purpose of this Agreement is an employee not obtaining board and lodging in a camp.

16.02 Each Community from which employees commute shall have an agreed central place or places as a marshalling point for the purpose of commuting.

Article XVI - Commuting Cont'd.

16.03 By January 1st, 1966 the Employers will have progressively arranged to provide free and acceptable transportation for commuters from the marshalling point to the disembarkation point in the work area. When transportation is by road, factory-built buses or automobiles will be used.

16.04 Employees shall not be allowed to commute to an operation in their own vehicles except by arrangement between the parties and the following allowances will apply:

	For Distances Up to Thirty (30) miles	For Distances Exceeding Thirty(30)Miles
Piecework Cutters	50 cents per cord	60 cents per cord
All others covered by this Agreement	$1.00 per day	$1.20 per day

16.05 Walking and Riding Time as defined in Article XVII shall apply from the marshalling point to the employees place of work.

16.06 If it becomes necessary to hire a man who is not a bonafide resident of a community from which free transportation is provided, board and lodging will be provided in that community by the Employer at the agreed camp rate.

16.07 Where camps are operating and board and lodging is available or where free transportation is provided, employees who use their own transportation will not receive a commuting allowance.

16.08 Notwithstanding the foregoing provisions, bonafide residents of a community within walking distance of their place of work may commute on foot or otherwise, and walking time shall apply from the marshalling point in the community.

Article XVII - Walking and Riding Time

17.01 Walking and Riding Time will be established on the following basis:

(a) for the purpose of this Article it is agreed that an employee walks at the rate of three (3) miles per hour.

Article XVII - Walking and Riding Time Cont'd

(b) time allowances for riding from the designated starting point to the disembarkation point will be estimated by agreement between the parties.

(c) where travelling time to the place of work is composed of walking and riding it shall be combined.

(d) walking and riding time from a camp shall be reckoned from the dining room door.

17.02 Two weeks after date of ratification to April 30, 1965 employees will be said for walking and/or riding time to and from work over three-quarters (3/4) of an hour each way as follows:

Day Workers: At their Regular Rates

Piecework Cutters:

Time	Rate Per Cord
45 - 60 Minutes	25 cents
60 - 75 Minutes	40 cents
75 - 90 Minutes	55 cents
90 -105 Minutes	70 cents
105 -120 Minutes	85 cents

17.03 From May 1, 1965 to April 30, 1966, employees will be paid for walking and/or riding time to and from work over one-half (1/2) hour each way as follows:

Day Workers: At their Regular Rates

Piecework Cutters:

Time	Rate Per Cord
30 - 45 Minutes	25 cents
45 - 60 Minutes	40 cents
60 - 75 Minutes	55 cents
75 - 90 Minutes	70 cents
90 -105 Minutes	85 cents
105 -120 Minutes	$1.00

17.04 Walking and/or riding time shall not exceed two hours each way.

APPENDIX D

GLOSSARY

BATCHING - Sleeping in small and usually very rough private camps. Differs from "shacking" in that loggers do not eat in these camps. Normally used in the phrase "shacking and batching". See also "shacking".

BLAZE - The conspicuous mark on a tree-trunk where a chip has been taken off. Used to indicate a line or path through the forest.

BLOCK - The area to be logged. Also, the timber limits of the two pulp and paper companies.

BOXY - A type of wood, particularly spruce, which tends to make a saw bind. After being sawn lengthwise, this type of wood tends to curl.

BROW - A pile of sawlogs near water. The logs are piled parallel to the water, with each tier of logs resting on two or more slender poles laid across the preceding tier, and the front logs resting in notches in the poles. This ties the logs together and permits the face of the brow to be nearly perpendicular. The logs are transferred to the water individually or by knocking out a bottom log and collapsing the brow. Also, a simple pile of pulpwood. (Also used as a verb).

BUCKERS - Those who cut the trees into convenient lengths after removing all branches. They also usually pile the pieces of wood on the ground or on truck pallets. Term has arisen with mechanized logging.

BUCK SAW - A cutting tool consisting of a steel blade in a metal frame. It is worked by hand, and was used in pulpwood cutting before the introduction of the power saw, or chain saw. Normally used by one person, but it may be used by two.

BUNK - (1) A bed. Hence "to go to bed" becomes "to go to bunk".

(2) Part of a sled used for hauling wood. It is a heavy piece of timber which spans the two runners and on which the wood is piled. Hence "bunk-sled". See "rack".

CAMP -

(1) A number of buildings, including a cookhouse and bunkhouse, used as a base of logging operations.

(2) The site of a logging operation. After logging has ceased that area may still be called "Camp X".

(3) Collectively, the men who live in a set of camp buildings.

(4) A temporary shelter erected in the woods, usually to accommodate up to six men.

CHANCE - The actual piece of land with trees on it which a man or a camp is to cut over. Thus a man can have a "poor chance", or a camp a "good chance". Probably derived from the use of chance as the opportunity to make money. Factors which determine the quality of the "chance" are the type of terrain, the timber density, the distance for hauling, etc..

COMMUTER - An employee not getting board and lodging in a camp, and not a bonafide resident of the community in which he works. Thus "commuting" means the act of travelling daily to and from work, from living quarters other than a company camp.

COOKEE (coo-kee) - Cook's Helper.

CONTRACT, ON - Cutters consider themselves "on contract" if they are being paid per unit of production, and "on wages" if they are being paid per unit of time.

CORD - The measure of the volume of wood; 128 cubic feet. Most commonly, refers to a pile of wood 4' x 4' x 8'. Such a pile equals 80 cubic feet of solid wood, and is called a "rough cord".

CUT, THE - The volume of wood produced, measured in rough cords. This may refer to the amount to be cut by a camp, a contractor, or a company.

CUT AND BUNCH - Similar to "cut and pile", except that the logs are merely thrown haphazardly in a heap rather than methodically piled.

CUT AND PILE - To cut trees, saw them into convenienct lengths, and pile them on the spot. Also called "stump piling".

DRIVE, THE - The floating of wood down rivers and streams to a mill. Normally done during the spring run-off.

DROPPING - The operation of cutting down trees. May include the removal of some branches and the tops of the trees. This is the function of the "fellers" (see below).

FELLERS - Those who cut down the trees. Their job may include the removal of some branches and the tops of the trees. See "dropping". Term has arisen with mechanized logging. In Dominion Bureau of Statistics publications, for British Columbia, these men are called "fallers", as in United States. See Ralph C. Byrant, Logging, 2nd ed. (New York: John Wiley & Sons, Inc., 1913, 1923) p. 483.

FLUNKEY - Chore boy; or person of any age who has no specific task but may be asked to perform any or all of a number of duties around the camp.

FORESTRY - Primary resource exploitation of the forests, chiefly logging.

FULL-TREE LOGGING - See "tree-length logging".

GO-DEVIL - A small wooden sled used with a horse to haul logs, usually on rough ground. (See "tail-drag"). Differs from a sled in that the latter has steel shoes and sawn runners, whereas a "go-devil" is usually made of unsawn timber.

HANDY - Near, in close proximity to; also, skillful, dexterous.

HAUL-OFF, THE - The hauling of wood from the places in which it was originally piled or from "yards" to a main transportation route.

HOT-LOGGING - The rapid movement of wood from the forests to the mill to assure a continuous supply of fresh wood.

KETTLE, BOAT'S - A pot-type container, usually made of tin, but sometimes made of copper, having perpendicular sides, a cover, and a hanger (or handle), ranging in size up to two or three gallons. This kettle has no spout. Used for various purposes around a cookhouse, including cooking.

LANDING -

(1) A pile of logs or, especially, pulpwood. Contrasts with "brow", which is normally a pile of saw-logs.

LANDING (Cont'd)

(2) A specific area of cleared land where wood is accumulated, cut into shorter lengths, etc. Also a cleared area on the shore of a lake or bank of a stream where wood is piled or dumped.

LOG - A length of a tree trunk of sufficient size for lumber to be sawn from it. Pieces of pulpwood are not usually called logs. See also "stick".

LOGGER - Workers in all phases of the primary forest industries may be considered loggers. The majority of these men are pulpwood cutters. Thus all cutters would be loggers but not all loggers are cutters. See also "logging".

LOGGING - To cut logs from which lumber is to be sawn. Thus pulpwood cutting is not logging in this sense. A pulpwood cutter will generally consider himself a logger, but when he says that he is going "logging", he means that he is going to cut saw-logs and not pulpwood. In this paper, however, "logging" generally refers to working in the pulpwood industry.

LUMPING - A term which appears in labour negotiations. Means the combining of two classifications, e.g. cutting and hauling, to form one rate. Thus, instead of being paid a price for cutting and a price for hauling, the worker received a lump sum for wood delivered to a prearranged point.

MUSKEG - A track-type vehicle used on rough or swampy ground. May be used for the transportation of pulpwood as well as other commodities.

PALLET - A removable loading frame of what is known as a "pallet" truck. Each truck has two or more of these pallets which are loaded with pulpwood while on the ground, thus eliminating high lifting. The truck is kept in continuous operation, stopping only to discharge the empty pallet and to winch aboard a loaded one.

PAUL BUNYAN - A large rough sled made usually from two large curved birch tree trunks, hauled by tractors. Pulpwood is piled on these sleds. They may be used in summer or winter.

PLACE - Community, or settlement.

RACK - A frame, placed on two "bunk-sleds", upon which pulpwood is piled. The two sleds are connected by chains, and the rack consists of two long logs about 4"-6" in diameter with the ends placed upon both sleds, and across which the wood is piled. Mostly used in hauling wood with horses. "Rack" has been lately used in referring to the stake frame of a truck.

SCALE - To measure the volume of wood cut. Hence the person who scales is called a "scaler". Also the period of time which elapses between measurements; thus pulpwood is now scaled every eighteen days, which period is called a "scale".

SCALER'S ROD - The measuring stick used by the scaler to determine the dimensions of a pile of wood. It is eight feet long, collapsible to four feet, and calibrated in inches.

SCOTE-SHORE - A stick placed at an angle to an "upstand" in order to support the pile of wood. One end is driven into the earth and the other is placed in a notch in the upstand - It is the hypotnuse of a right-angled triangle formed with the upstand and the ground. From "shore" meaning a pillar, and "scote" meaning, in the vernacular, to push or work hard.

SCRUB - Poor quality timber; usually scattered, short, and full of branches. May be used for pulpwood.

SECOND-HAND - The assistant foreman, or sub-foreman.

SETTLEMENT - The equivalent of "pay-day". Formerly it was commonplace for a "settlement" to include more than one scale; in recent years, however, "settlement" takes place at the end of each "scale".

SHACKING - Living in a small and usually very rough private camp. Shacks are used by commuting loggers whose homes are not within commuting distance. "Shackers" provide for themselves. See also "batching": Usually used in phrase "shacking and batching".

SHOES -

(1) Horse shoes

(2) Any durable material, usually steel strips, attached to the bottoms of sled runners. Reduces friction and prolongs the life of the runners.

SKIDDER - A machine similar to a farm tractor, except that the front wheels are as large as the rear ones. The machine has four-wheel drive. It is used to drag trees out of the woods. The ends of the trees are secured by cables to the rear of the skidder. The number of trees carried in one load depends largely upon their size. Now very popular in Newfoundland, where several brands are in use, all having the same essential features. Sometimes known by these brand names, e.g., Timberjack, Tree-farmer, Paylogger.

SKIPPER - The camp foreman, the job boss, or the contractor.

SLIDE - A small sled, usually called a "hand-slide".

STANCHION - Most commonly called "upstands", or, less frequently, "uprights". Vertical sticks to support a pile of wood, usually pulpwood.

STICK -

(1) Any small piece of wood, much longer than thick, such as may be easily carried in one hand.

(2) Log, especially long, large logs for purposes other than saw-logs, such as telephone poles, wharf piles or boom-logs (hence wharf-sticks, boom-sticks)

STUMP PILING - See "cut and pile".

SWAMP - To cut all trees and brush at ground level to prepare a "road" through the forest. Hence "swamper".

TAIL-DRAG - To haul logs with one end upon a sled and the other ends dragging the ground. The sled is often called a "go-devil". Tail-dragging is necessary on steep hills where ordinary sleds could not be easily controlled.

TANT - Tall, slender, with few branches, as in "tant tree" or "tant timber".

TREE-LENGTH LOGGING - Logging in which trees are merely cut down, topped, and dragged to a "landing" for further processing. Similar to "full-tree logging", in which the tops are also removed at the landing.

UPSTANDS - See "stanchion".

WAGES, ON - Payment by unit of time; see "on contract".

WATER-NIPPER - One whose primary responsibility is to supply drinking water to workers. Usually a teenager.

WHALE'S BACK - A long and round hill, resembling the back of a whale.

WINDFALL - A tree that has been blown down. May be used for pulpwood if wood has not deteriorated.

YARD - Area in the forests where pulpwood is assembled. Hence "yarding" means the hauling of wood to a central location, from which it is later transported to the mills.

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