

Power Tools as Tools of Power: Mechanization in the Tree Harvest of the Newfoundland Pulp and Paper Industry

MARK J. McLAUGHLIN

THE PULP AND PAPER INDUSTRY has been a major player in the Newfoundland economy for over a hundred years. In order to develop the industry, the Newfoundland government at the beginning of the twentieth century opened the forests to international corporations, since local capital was not available. By World War I, two international companies dominated the industry — the Anglo-Newfoundland Development Company [AND], based in Grand Falls, and Bowater's Newfoundland Pulp and Paper Company [Bowaters], based in Corner Brook. Both AND and Bowaters applied Fordist concepts to the pulp and paper industry in the 1940s and 1950s in an attempt to maximize its efficiency and their economic returns.¹

Classical notions of Fordism refer to a variety of mid-twentieth-century interventionist policies adopted by North American governments and industry leaders, which were supposed to increase industrial efficiency and reduce uncertainty. The classic Fordist “experience” of labour-management relations cannot always be applied neatly to different areas of historical inquiry. For example, one of the Newfoundland paper companies' Fordist policies was the mechanization of the tree harvest, which resulted from a struggle between capital and labour over increased profits after World War II. This was a form of indirect Fordism, which encouraged a type of logging in which workers made more money by increasing the volume, but not the value, of the wood cut. The companies' strategy was to make the loggers responsible for the initial costs of adopting new technologies to increase their efficiency, and they also expected loggers to increase their earnings through the existing piecework pricing system, although this had not benefited the average woodcutter. The introduction of power saws is an important example of the way in

which international paper companies encouraged loggers to adopt new forms of technology in order to maintain an expected level of output and an adequate standard of living. While loggers felt that the overall impact of power saws was positive, they experienced no significant increases in productivity or earnings. Furthermore, the Newfoundland example suggests that the historical study of natural resource industrialization demands a broader understanding of the Fordist experience than is available through the use of classic Fordism associated with more metropolitan and urban contexts.²

Historians of the North American labour movement and working class have pointed out that Fordist industrial relations after World War II broke with the earlier reform of manufacturing associated variously with Henry Ford's assembly lines, or Taylorist "scientific management." The post-war, or "classic," Fordism entailed a formal industrial legality based on employers' and unions' accommodation of each other through collective agreements. The goals of such industrial legality were the avoidance of work stoppages, industrial stability, maximization of efficiency, and higher profits.³ Classic Fordism, however, did not work in all contexts. For example, Canada's reliance on "relatively unprocessed natural resources as leaders of the economy" and "high rates of capital and goods imports" created different market and negotiating conditions from those in the United States.⁴ The United States was the chief importer of Canada's natural resources after World War II, and often provided the necessary capital to establish Canadian natural resource harvesting operations (similar to the case of British companies in the Newfoundland pulp and paper industry). Specific forms of Fordism developed within particular social circumstances, and the examples that developed in Canada cannot be considered "unique," simply "different," as "no country has exactly the same history of political mediation of class, gender, linguistic or other social relations."⁵ While larger Fordist aims and techniques remained constant between geographical areas (stability, maximization of efficiency, minimization of costs, linking wage increases with increases in production), the precise nature of that experience depended on the time and location.⁶

In particular, the historical study of natural resource industrialization demands a broader and fuller understanding of the Fordist experience than is available through the use of classic Fordism. Classic Fordism is hard to apply comfortably outside metropolitan areas, and does not meet the "slippery" and dynamic circumstances presented by the study of regions based on resource harvesting — regions that are "rooted in remoteness, high levels of export-dependence, specialization, and external control."⁷ Thus areas reliant on resource harvesting are sometimes treated as "resource peripheries," and academics, knowingly or unknowingly, examine them simply as areas exploited by metropolitan and industrial centres, such as mill towns.⁸ A trend in the labour history of forestry suggests that we must understand the sphere of woods work not as a "resource periphery," but as its own "industrial centre" to fully appreciate "the distinctiveness of resource-based production

systems as alternatives to dominant models of core-based industrialization.”⁹ “Resource peripheries” must not be marginalized and should be studied as independent, industrial regions, as “industrialization depends on resources as much as on markets,”¹⁰ and a broader definition of Fordism is needed to reflect a change in approach to the study of resource-based areas.

A good example of a broader understanding of the Fordist experience of natural resource production is a recent study of the industrialization of the North Atlantic fishery, including that of Newfoundland and Labrador. The governments of Newfoundland and Canada introduced policies after World War II, such as resettlement, unemployment insurance, and increasing capitalization of production, in order to concentrate the fishing industry within large, vertically integrated firms rather than in the small household enterprises of the inshore fishery. Government and industry viewed the rationalization of the resource-based regions as a positive step toward delivering cheaper raw materials more efficiently to the fishery’s processing plants.¹¹ Yet, such modernization did not eliminate the inshore fishery and can be seen as evidence that the fishery’s resource-based regions were more than simply areas of exploitation. Some local fishermen were able to survive the new pressures, demonstrating their ability to act as agents of change within larger social structures. At the same time, modernization was very much the model for private and public industrial policy in the early 1950s, and it is not surprising that the pulp and paper companies adopted the Fordist mechanization of the tree harvest.¹²

Mechanization was beneficial to the companies, but it was not a one-sided process. Much of the current political economy literature treats loggers simply as extensions of companies’ and governments’ economic policies, rather than as active agents in the development of such policies.¹³ However, the same trend in the labour history that argues that the sphere of woods work should be considered its own industrial centre, also suggests that we must understand the industrialization of forestry as the result of the separate interests of both capital and labour, which often reached awkward accommodation through the process of industrial relations. In a Fordist system of production, prices are the primary determinant of competitiveness. Thus, management viewed the role of labour in terms of its cost of production; wages constituted a high proportion of costs in logging operations, and had to be minimized if the companies were to remain competitive.¹⁴ In the Newfoundland case, there is some evidence that loggers supported mechanization independently of the companies, hoping that they might improve their earnings.¹⁵ However, AND and Bowaters, acting through the Newfoundland Woods Labour Board [WLB] and various internal policies, sought to shape loggers’ demands for better pay in ways which would support the companies’ industrial goals.

During the late nineteenth century, the Newfoundland government embraced a “national policy” of economic diversification based on railway building and the development of land-based resources. To develop inland resources, the government relied on international corporations to provide the necessary capital for the creation

of new industries and export-led growth. This meant that Newfoundland's economic development would be dependent on such corporations for decades.¹⁶

The pulp and paper companies arrived initially because the existing sawmill industry had expanded to the point at which the stands of lumber-quality timber had begun to run out.¹⁷ The English newspaper giants, Alfred and Harold Harmsworth, had established the *Daily Mail* newspaper in 1896, and were searching for a secure source of newsprint. As a result, on 5 June 1905, the government granted a 2,000-square-mile lease to the Harmsworths' Anglo-Newfoundland Development Company, which built a mill at Grand Falls.¹⁸ Several years later, in 1915, the Reid Newfoundland Company formed the Newfoundland Products Corporation to develop its holdings in western Newfoundland. Unable to raise enough capital for direct development, the Reids formed a partnership with the Armstrong, Whitworth and Company of England and created the Newfoundland Power and Paper Company (1923), which built a newsprint mill at Corner Brook. The International Power and Paper Company of New York took it over in 1928, but the mill was not financially stable until Sir Eric Bowater, already the largest newsprint manufacturer in England, bought it. He created Bowaters' Newfoundland Pulp and Paper Company in 1938.¹⁹

A close relationship developed between the Newfoundland government and the pulp and paper companies, but this was not unique. In the early twentieth century, provincial governments across Canada similarly relied upon large corporations for "incremental growth," or the establishment of further secondary industries once a primary, resource-based industry was well established.²⁰ The Newfoundland government began what developed into a corporate/bureaucratic partnership, where the country's social and economic well-being were associated with the growth of international corporations, which obtained major concessions such as those which brought AND and Bowaters to the island.²¹ The companies also invested large amounts of capital in the pulp and paper industry, which both sides were eager to see become, and remain, profitable. They were not interested in anything that might impede further development.

In the mid-to-late 1930s, unions began to organize the loggers. The first was Joseph Thompson's Newfoundland Lumbermen's Association [NLA]. The Fishermen's Protective Union also spoke for loggers, as did the Newfoundland Labourers' Union and the Workers' Central Protective Union. The NLA organized strikes during the last half of the decade in response to the deplorable conditions in which loggers worked and lived.²² With the onset of World War II, the government and the companies sought to avoid loggers' strikes in the interest of the war effort and of corporate profitability; hence the creation of the Newfoundland Woods Labour Board in 1940.²³

Originally a labour relations forum, the WLB became a Fordist tool of the government and the pulp and paper companies, even though the four loggers' unions were represented. The companies provided loggers with meagre benefits during the

1940s and early 1950s; there were no work stoppages, and the companies continued to profit from cheap labour.²⁴ In time, the unions became more assertive.

In 1954, during the spring session of the WLB, Pierce Fudge, President of the Newfoundland Labourers' Union, asked the companies to grant loggers a one-time bonus to even the wage rates of mill workers and woods workers. Mill workers, who were paid an hourly wage, had received a 3 percent increase in pay the previous fall. Loggers, most of whom were woodcutters, were paid on a piecework rate, by the cord. The more they cut, the more they made. The unions argued that the industry had become dramatically more profitable since the end of the war, and that all the companies' workers should receive their fair share. There was no difference between work in the mills and work in the woods, and when one side received an increase in pay, so should the other. A collective agreement was drawn up each fall between the loggers' unions and the companies through the WLB, which determined rates and working conditions for the following year, with no provision for changes. The last agreement had not increased rates, and the loggers' unions now wanted a bonus.²⁵

The companies were not receptive. Albert Martin, Woods Manager for Bowaters, responded that it had been a bad year, and in order to remain competitive with mainland companies, AND and Bowaters could not increase loggers' wages. B.W. Potts, Woods Manager for AND, agreed, and pointed out that there had been no increases in loggers' wages in Quebec or the Maritimes for several years, and that rates had even gone down in northern Quebec. The companies saw no correlation between mill work and woods work: woods wages were driven by what was paid to mainland loggers, not by what Newfoundland mill workers received.²⁶

The companies' position on loggers' wages was further explained in 1956 by T.R. Moore, General Manager of AND, in response to a question about the difference between mill and woods wages:

Mr. Moore: replying to Mr. Fudge stated because the price of paper went up did not mean that everybody should get a slice of it. That was a mistaken idea. The point was, and which should be remembered, that the woods industry in Newfoundland had to stand on its own feet. If woods wages increased five percent the price of wood goes up five percent, but if mill workers get a five percent increase the price of paper does not go up five percent. That fact should be borne in mind. There have been colossal increases in wages but the cost of producing paper had not gone up near the same in proportion. The woods industry in Newfoundland had to compete with a similar industry on the mainland that provided wood for mainland mills.²⁷

The companies held that loggers' pay was a higher proportion of the cost of pulpwood than mill workers' wages to the cost of paper. AND once estimated that labour costs constituted 63 percent of the total production cost of pulpwood.²⁸ Thus the smallest increase in logging wages would drive up the price of pulpwood to the point where the Newfoundland companies could not remain competitive. Such

concessions would only drive up the price of pulp, and, consequently, the price of paper.

AND and Bowaters drew further distinctions between mill and woods work. During the 1954 spring session, Joseph Thompson, President of the NLA, wanted to know why woods foremen and scalers had received the same 3 percent increase as mill workers. Potts responded that they had always been considered “regular staff,” and, consequently, received the same rates as mill workers. This suggests that the companies ranked average loggers, most of whom were woodcutters, below mill workers and other “regular staff.”²⁹ (Loggers were involved in every step of the process of cutting and transporting pulpwood to the mill, while woodcutters were the loggers who only cut the trees.) Furthermore, the companies argued that woods work was not as highly skilled as other areas of work within the industry. Mill workers, woods foremen, and scalers “cannot be trained and made to give efficient results overnight.”³⁰ They were part of established operations that had taken many years of experience to build up. In contrast, loggers, more specifically woodcutters, were part of a fluid group that was constantly changing and needed very little training.³¹ They were semi-independent, seasonal workers from the fishing outports, trying to increase family incomes by cutting a few trees.³² Since loggers were not as highly trained and skilled as “regular staff,” according to the companies, they should not receive the same rate of pay.

The companies also argued that loggers’ pay was already high enough, since Newfoundland had some of the highest paid loggers in the country. AND went so far as to publish a pamphlet entitled *Pulpwood, A Multi-Million Dollar Industry: Newfoundland Loggers Enjoy the Highest Wage Scale in Eastern Canada*, as part of its attempt to counter union demands for increased wages during the 1950s.³³

The unions attempted (unsuccessfully) to counter the companies’ arguments. Fudge acknowledged the competition faced by the Newfoundland pulp and paper companies, and the higher wages received by local loggers, but he argued that mainland loggers had certain advantages. For example, mainland companies often paid the travel costs for their loggers, while Newfoundland loggers had to pay their own way to company camps. Given that Newfoundland did not have a well-developed road system in the 1950s, travel was a major expense.³⁴ Moreover, Fudge argued, the cost of living was much higher in Newfoundland than it was on the mainland.³⁵

AND and Bowaters responded by describing, often at great length, the position of their companies within the larger Canadian industry. They held that mainland companies had access to a large volume of purchase wood, that is, wood that could be bought from farmers and other private producers. They could obtain as much as 30 percent of their wood from such sources, which decreased overall production costs, since the companies did not have to pay for labour.³⁶ In addition, transportation costs for pulpwood were much higher in Newfoundland, since many more woods roads had to be cut than on the mainland, which had a better-developed highway system.³⁷ Finally, the companies held that they had a low return on the amount

of capital invested in the industry, and that they were “the lowest earners” in the Canadian industry.³⁸

As a result, AND and Bowaters proposed a different answer to the question of how loggers could earn more money. At a WLB meeting in 1956, Moore stated that loggers should find ways to increase production rather than look to the collective agreement to boost earnings.³⁹ It made no economic sense to pay the loggers more for what they already cut; if loggers wanted to increase their earnings, they simply had to produce more pulpwood. He did not state directly that loggers should adopt power saws, but mechanization was clearly implied. This was the beginning of a trend to urge loggers to increase their productivity and earnings, which was supported by the Chairman of the Board, Raymond Gushue, who at the same meeting observed that production in Newfoundland mills had increased over the last two years, with no increase in the mill workforce. Increased paper production meant increased profit, which allowed AND and Bowaters to pay mill workers higher wages. Thus he “felt the crux of the whole matter was if wages were to be increased proportionately in the woods, production must first show a corresponding increase.”⁴⁰

In April 1956, the loggers’ unions called an emergency meeting of the Board. There were several months left in a two-year collective agreement signed in 1954, but the unions wanted to open negotiations since there had been a major upturn in the pulp and paper industry, and the unions wanted loggers to receive their fair share of the increased profits.⁴¹ Fudge argued that everyone had seen some benefits from increased paper prices, except woods workers. Thompson added that the unions had signed the two-year agreement in good faith when the fate of the industry had seemed bleak. Now that the companies were making healthy profits, the unions wanted the loggers to benefit.⁴² During the first two days of meetings, the companies expressed dismay that the unions wanted to break the collective agreement. They were apparently shocked by the unions’ demands, which included improvements to company camps, personal benefits such as paid vacations, and a bonus of 30 cents per cord for those loggers who cut in excess of 50 cords for any one company in any one season. If all the demands were met, the companies would have had to increase spending by millions of dollars.⁴³

On the third day the companies suddenly changed their position and introduced the possibility of increased wages amounting to \$1.5 million over the following year. Albert Martin explained that company representatives would have to consult with their superiors, but he was quite sure the raise would be approved. There was one condition — AND and Bowaters expected a significant increase in loggers’ efficiency and productivity so that the increase could be afforded. The unions were so pleased with the amount pledged by the companies that they dropped most of their original demands, and further guaranteed that the tree harvest would become much more efficient. Fudge even stated that “after all, the Unions can only hope for increases when production is increased,” a statement with which the other union leaders agreed.⁴⁴

Throughout the discussions at the WLB, the companies did not openly suggest that loggers should adopt power saws. However, company representatives referred to the increased efficiency experienced by mainland companies through the switch to power saws. If loggers wanted to increase their earnings, they simply had to produce more pulpwood, and earn more through the existing piecework pricing system. This did not operate in favour of the average woodcutter, though, since there were no guarantees that men would receive fair take-home pay. Loggers employed to haul pulpwood to the mill received a guaranteed daily rate, but woodcutters had no equivalent. Instead, they had to deal with maximum, minimum, and average rates negotiated between the woods unions and the companies in each new labour agreement. The maximum and minimum rates were supposedly in place to ensure that each logger earned a fair rate based on individual skill and experience. Theoretically, whether loggers cut in good, medium, or bad wood did not matter,⁴⁵ since officials could change the per-cord rate depending on the type of wood that a logger was cutting. He received a lower rate in good wood and a higher rate in bad wood, while the average rate acted as a benchmark. In theory, two loggers of equal cutting ability, one cutting in good wood and the other in bad wood, should have earned approximately the same amount at the end of each day.⁴⁶

However, the system did not work like this in practice. The Commission of Enquiry on the Logging Industry (1960), appointed by the provincial government and chaired by Sir Brian Dunfield, found that most loggers consistently disputed the “price of wood,”⁴⁷ and concluded that this issue was a primary cause of the bitter International Woodworkers of America [IWA] strike of 1959.⁴⁸ The Commission found that it was the companies’ control of the per-cord rates that was the biggest defect in the piecework system. Camp foremen in the case of AND, and contractors in the case of Bowaters, decided on the final per-cord rates by making an educated guess, based on experience, as to what sort of wood loggers were cutting. Earnings depended on what foremen and contractors considered to be a fair and balanced price, and such judgements varied “from time to time and place to place.”⁴⁹ Furthermore, for such a pricing system to work effectively and fairly, loggers had to be rotated, so that each logger had an equal amount of opportunity in prime cutting conditions (good wood).⁵⁰

Loggers complained of large variations in earnings, since differences between good and bad wood were so high that the maximum and minimum rates often made no real difference. The Dunfield Commission provided a hypothetical example using the maximum and minimum rates from the 1960-1962 labour agreement. In one day, a logger cutting in very bad wood might cut one cord at \$9.21 per cord; at the same time, another logger might cut four cords in good wood at \$6.46 per cord, earning a gross total of \$28.54. Even though the first cutter received the maximum rate to offset the fact that he was cutting in bad wood, there was such a large difference in the quality of wood that the maximum and minimum rates were ineffective. The Commission encountered such situations repeatedly during their investiga-

tions.⁵¹ Also, loggers complained that cutters were not fairly rotated. Instead of “pricing the wood,” foremen and contractors often ended up “pricing the man,” or giving the best woodstands to the best cutters. The Dunfield Commission thought that this criticism was inappropriate, since the middlemen had to deliver large amounts of wood. Loggers held that the system was unfair to cutters of average ability.⁵²

Foremen and contractors had a vested interest in producing as much pulpwood as possible, and were encouraged by the companies, though in different ways. AND relied on camp foremen who were employees of the company, and most of its pulpwood was cut in AND camps. In 1960, 93.4 percent of AND pulpwood was cut in its own camps; only 4.3 percent came from small contractors.⁵³ Camp foremen could make incentive pay “by speeding up work, by good organization, by effecting economies, by availing smartly of natural conditions.”⁵⁴ Bowaters relied entirely on large and small contractors, and jobbers. Large contractors owned and ran three or four camps each, and provided approximately 26 percent of the annual amount of pulpwood that Bowaters needed. These contractors often used Bowaters’ logging equipment and relied on the company to provide credit to pay loggers’ wages. Small contractors usually ran one logging camp at a time, but also relied on Bowaters for equipment and credit, and accounted for 63 percent of the annual cut. Jobbers were independent operators, producing from 20 to 1,500 cords annually, and accounted for 11 percent of the total cut.⁵⁵

Bowaters’ contractors were not independent employers. Interviews with loggers from the White Bay South area indicate that contractors acted very much like camp foremen.⁵⁶ All the loggers interviewed had spent most of their careers working for Bowaters, or Kruger Incorporated after it bought the Corner Brook mill in 1984,⁵⁷ and many had also worked for AND in the 1950s or 1960s. Those who had worked for both companies had found no real difference in how camps were run in either harvesting operation.⁵⁸ Loggers considered the contractors to be Bowaters’ employees, and identified themselves as having worked for Bowaters, not for individual logging contractors.⁵⁹ Also, the large and small contractors, who provided 89 percent of the company’s annual cut, relied heavily on Bowaters’ equipment and financial assistance, so they were very much integrated into the company system. Finally, Bowaters stipulated, “in all contracts that contractors should abide by the rules laid down by [the] WLB.”⁶⁰ Contractors were not completely independent third parties, but were rather more like subsidiaries within a larger company system.⁶¹

The contracts between Bowaters and the contractors outlined that “if any contractor were deliberately or continually to depart from the letter or spirit of the labour agreement, he would not be considered for award of a contract in future years.”⁶² The contractors conducted business knowing that Bowaters controlled their fate. They needed Bowaters to stay in business, and understood that if a contractor departed from “the letter or the spirit of the labour agreement,” the company would simply not renew his contract. This was a major incentive for contractors to do ev-



everything in their power to keep the company satisfied with their performance, such as their ability to maximize output.

Given that foremen and contractors were under such pressures, they likewise pressured loggers to increase productivity. They tended to assign their best cutters to areas of good wood in an attempt to try to attain higher output levels from the loggers under their supervision (foremen, to receive incentive-pay; contractors, to keep their contracts). Furthermore, it was common practice to let go those loggers who were slow cutters. Interviews suggest that foremen and contractors favoured employing those men who could help them “get their cut.”⁶³ It is certainly possible that the pressure to cut wood more efficiently encouraged loggers to make the transition from bucksaws to power saws to increase output, or face the possibility of being fired.

Bowaters used another aspect of the contract system to encourage the adoption of power saws, which first appeared in Newfoundland in the mid-1950s. Company representatives went from camp to camp to demonstrate the new machines,⁶⁴ the first time that most loggers had seen them.⁶⁵ Salesmen also went to the camps to demonstrate power saws, and sell them to loggers on the spot. It is unclear whether Bowaters and the contractors encouraged them. The average price for a power saw in the mid-1950s was \$200 to \$250, depending on the brand, and many loggers could not afford to pay the full price on their own. Thus contractors bought power saws for the loggers, and the loggers paid them back from their monthly earnings.⁶⁶ However, loggers voided the arrangement and lost the saw if they left the camp before the debt was paid in full.⁶⁷ Contractors protected their investment, while encouraging loggers to stay and cut for the whole season. They needed to maintain high levels of output or lose their contracts. Bowaters expected a fixed number of cords each season, and contractors bought the power saws in an attempt to increase output and efficiency.

Bowaters could use the contract system to support an indirect Fordist policy, but AND had to rely on other methods. Grand Falls was a true company town, where everything came under AND influence or control. The company owned the mill, 441 houses, all the general stores, the stadiums, and the hospital. There was no town council, and the company administered the town’s business directly.⁶⁸ AND’s influence extended to the local newspaper, *The Advertiser*, which in the 1950s published articles that displayed enthusiasm and optimism about anything relating to the pulp and paper industry, and especially AND. For example, on 5 June 1955, a story was published about the Grand Falls mill setting a new output record:

It was announced yesterday that the Anglo-Newfoundland Development Company, Ltd. had created a new record in newsprint production at the Grand Falls Mill. The output for the twenty-four hour period ending yesterday totalled 813.59 tons.

This is the latest in a series of new productions records set by the Mill and congratulations on the achievement go to all concerned.⁶⁹

The newspaper was hardly an unbiased observer in the 1950s.

In 1954, advertisements in the *Advertiser* for power saws were few in number. One advertisement for the “New 1954 P. M. Rocket-K” stated that it was “the most easily handled saw on the market!” Its list of features included that it sized up to 32 inches and its saw’s new diaphragm carburetor allowed “for work in any position, without adjustment.” But nowhere in the advertisement was there any mention of increased sawing speed or the ability to earn more money.⁷⁰ In 1956, shortly after Moore’s statement about loggers increasing production, the number of power saw advertisements tripled. More importantly, the content differed from those of previous years. A Harvey and Company advertisement stated that “one NFLD. Logger using a McCulloch power saw made over \$650 in 24 and a half days in 1956.”⁷¹ The same month, Botwood Garage started advertising the “Pioneer Model, HM” power saw, including a cartoon depicting a man barely able to control a cutting saw, while another stated, “Awright, awright, so it’s the fastest saw in the world!”⁷² Three weeks later, one Harry Tait started advertising the “Homelite EZ” power saw which “makes quick work of any kind of woodcutting ... goes through 8" oak in 5 seconds, 18" pine in 14 seconds.”⁷³ The ads were no longer simply pushing the saws’ performance, they were also suggesting that loggers could saw more wood and earn more money, thus allowing the loggers to increase their rate of production, as the companies had suggested.

Besides relying on the *Advertiser* to encourage loggers to adopt power saws, AND used company literature as well. In August 1959, AND started publishing *The Newfoundland Logger*, a newsletter directed at loggers. The first issue featured a lengthy story about two brothers, Charlie and Albert Burton from Springdale, who had set several records for the most cords of wood cut in one day. The article described in detail how the brothers owed their records to their masterful use of their power saws, and it also highlighted how much money the brothers made in an average day.⁷⁴ Three months later, another article discussed how loggers’ earnings were at an all-time high, thanks to loggers using new technologies, such as power saws.⁷⁵ Numerous articles appeared in the *Logger* during its short life that showed loggers the benefits of power saws and increased efficiency. The newsletter also printed statements from company officials about the need for everyone to be as efficient as possible to keep production costs down, because AND had to survive in a competitive world market.⁷⁶ The newsletter was an excellent medium through which to influence loggers, whether to adopt new technologies or to demonstrate AND’s concerns about the industry.⁷⁷ AND also published a pamphlet entitled *Our Heritage of Wooded Wealth* in 1957, which stated that the “average earnings of men using power saws was up considerably over that of men using the bucksaw,” reiterating the notion that improved productivity would lead to higher earnings.⁷⁸

AND also instituted incentives for loggers to acquire power saws. For example, AND told Sterling Thomas, President of the Newfoundland Brotherhood of Woods Workers,⁷⁹ that the company would supply gasoline and oils to any logger who used

a power saw. In addition, AND would pay for the hire of any logger who brought a power saw for a full day's work, even if the woods foreman decided that logger was not needed on a particular day.⁸⁰ This would have been a major incentive for those loggers who did not own power saws to purchase them. Another such incentive, supported by AND and Bowaters, was put forward by the Woods Labour Board in January 1957 — the remission of tax on “Acto” gasoline for use in power saws. J.D. Roberts, Woods Manager for Bowaters, argued that since fishermen did not pay tax on gasoline used in their boats, loggers should receive the same benefit.⁸¹ The provincial government granted the request several months later.⁸²

It is difficult to determine precisely the impact of the mechanization of the pulp and paper industry on Newfoundland loggers. It is clear that the number of loggers employed in the industry decreased dramatically, but there is disagreement over the numbers. One estimate puts the number of loggers at 5,400 in 1952 and 2,653 in 1963, approximately the period when power saws were being adopted.⁸³ According to another estimate, between the early 1950s and the early 1960s, the number of loggers declined from 16,000 seasonal workers to 5,000 professional workers.⁸⁴ Census data offers further insights. In 1951, the number of people who listed themselves as employed in logging, both male and female, numbered 10,333. The figure for those working in the pulp and paper industry, or more specifically, the mills, was 4,565.⁸⁵ In 1961, those listed as employed in logging had decreased to 6,711, and those employed in the mills had decreased to 3,461.⁸⁶ A decade later, the number of people employed in logging was 2,385 and the number in the mills was 3,085.⁸⁷ For the first time in the history of the Newfoundland pulp and paper industry, the number of mill workers exceeded the number of loggers. Such a significant decrease demonstrates that fewer and fewer loggers were needed to meet the demands of a modernizing industry. The companies' Fordist aims had succeeded in decreasing the number of loggers, thus increasing efficiency and reducing production costs.

Interviews with people who logged during the introduction of power saws offer additional insights regarding other effects of mechanization on loggers. Most loggers were able to cut almost double with the power saw what they could with the bucksaw. The average cut with a buck saw was approximately 2 cords per day, while the average cut with a power saw was 3 to 4 cords per day. Whether this represents a logger's full cutting ability is not known. One logger reported that he could cut up to 7 cords per day and that he was known for his ability to cut large amounts of wood.⁸⁸ Another stated that he cut the same amount with both saws, about 3½ to 4 cords per day, but found he could cut more quickly with the power saw.⁸⁹ The amount of wood that a logger cut really depended on the quality of wood that he was working in. If he was in “good wood,” then he could cut more, but he would have a bad cutting day if he was working in trees that were thin and sparse.⁹⁰

All of the loggers stated that their earnings increased after they adopted power saws, but they were not certain if the increase was due to the switch to the new saws. One logger definitely found that his earnings went up, but stated that it was not be-

cause he could cut more; he reported that his earnings only increased with the cost of living.⁹¹ This suggests that earnings simply followed normal patterns of inflation and that increases were not solely dependent on loggers adopting power saws. Furthermore, loggers noticed that accidents became more numerous after the introduction of power saws. Some of this can be attributed to the fact that loggers had to teach themselves how to use the saws, but it appears that the main reason was carelessness. Many loggers cut too fast in trying to increase their earnings; they became less careful, and more accidents occurred.⁹²

Although much more work needs to be completed on the relationship between Fordism and the loggers' changing work environment, there is no doubt that the Newfoundland pulp and paper companies pursued an indirect Fordism.⁹³ The classic Fordist experience of labour-management relations does not apply in this situation, but this does not necessarily imply that a Fordist system of production was not present. AND and Bowaters encouraged the adoption of power saws in order to put the onus on loggers to cover the initial costs of new technologies and increased efficiency. They thought increased productivity within the existing piecework pricing system was the answer to union demands for wage increases in the 1950s. However, variations between good and bad wood were often so large that the minimum and maximum rates paid per cord frequently had no effect. The Dunfield Commission showed that the companies controlled the pricing system in an unfair way, often "pricing the man," or putting the best cutters in the best wood stands to increase productivity. As such, there were large variations in loggers' take-home pay. Camp foremen and contractors further pressured woodcutters to increase productivity in an attempt to "get their cut," and Bowaters used representatives to demonstrate power saws at the logging camps. On the other hand, AND had no contract system, so it had to rely on other means, such as the *Grand Falls Advertiser*, company literature, and certain incentives.

Management viewed the role of labour in terms of its cost of production and minimized those costs through its use of indirect Fordism. In using the language of Fordism, and providing very few of the actual benefits to workers, the companies were able to avoid providing capital for the initial costs of mechanization. AND and Bowaters also avoided any real increase in wages, thus remaining, in their view, more competitive within the larger Canadian pulp and paper industry. The Newfoundland example suggests that the historical study of natural resource industrialization demands a broader understanding of the Fordist experience than is available through the use of classic Fordism associated with more metropolitan and urban contexts. Resource-based regions should not be treated as "resource peripheries," but should be studied as independent, industrial regions. A change in approach to the study of resource-based areas should be reflected in a change to the approach of how Fordism is applied to historical study.

Notes

¹The Coasts Under Stress Project through the Social Sciences and Humanities Research Council of Canada [SSHRC], the Natural Sciences and Engineering Research Council of Canada [NSERC] and the SSHRC Major Collaborative Research Initiatives [MCRI] program, funded most of the research for this article. Funding was also provided by Memorial University of Newfoundland and the University of Victoria.

²The purpose of this discussion is to suggest that historians need to broaden their examinations of the Fordist experience, a trend within the so-called “new Canadian political economy” [NCPE], not to offer a new or more precise definition of Fordism. Furthermore, while reference is made to both NCPE and labour and environmental history sources, this article does not offer a synthesis of the disciplines. Such a discussion would have to address numerous “sticky” issues, such as the identity of agents of change (e.g., dominant groups vs. labouring groups).

³For more discussion on classic Fordism, see David M. Gordon, Richard Edwards, and Michael Reich, *Segmented Work, Divided Workers: The Historical Transformation of Labor in the United States* (Cambridge University Press, 1982), 145-146, 165-209, and Bryan Palmer, *Working-Class Experience: Rethinking the History of Canadian Labour, 1800-1991* (Toronto: McClelland and Stewart, 1992), 18, 278-290.

⁴The exact nature of the structural differences between Canada and the United States is not critical for the present discussion. It must simply be noted that differences did exist, and for the forest industry, see Roger Hayter and John Holmes, “The Canadian Forest Industry: The Impacts of Globalization and Technological Change,” in Michael Howlett, ed., *Canada Forest Policy: Adapting to Change* (Toronto: University of Toronto Press, 2001). Also Jane Jenson, “Representations in Crisis: The Roots of Canada’s Permeable Fordism,” *Canadian Journal of Political Science* 23 (Fall 1990), 659.

⁵Jenson, “Representations in Crisis,” 659.

⁶Jenson, “Representations in Crisis,” and Jenson, “Different but not Exceptional: The Feminism of Permeable Fordism,” *New Left Review* (1990).

⁷Roger Hayter, “‘The War in the Woods’: Post-Fordist Restructuring, Globalization, and the Contested Remapping of British Columbia’s Forest Economy,” *Annals of the Association of American Geographers* 93 (Summer 2003), 707.

⁸J.P. Bertrand, *Timber Wolves: Greed and Corruption in Northwestern Ontario’s Timber Industry, 1875-1960* (Thunder Bay: Thunder Bay Historical Museum Society, 1997); M. Patricia Marchak, *Green Gold: The Forest Industry in British Columbia* (Vancouver: UBC Press, 1983); Andrew Mason Prouty, *More Deadly Than War!: Pacific Coast Logging, 1827-1981* (New York: Garland Publishing, 1985); Peter Welsh, *Jacks, Jobbers and Kings: Logging the Adirondacks, 1850-1950* (Utica, NY: North Country Books, 1995); and Jeremy Wilson, *Talk and Log: Wilderness Politics in British Columbia* (Vancouver, BC: UBC Press, 1998). Such is also the case in Dufferin Sutherland, “‘We are only loggers’: Loggers and the Struggle for Development in Newfoundland, 1929-1959” (PhD thesis, Simon Fraser University, 1995). He acknowledges that there was Fordist production in the Grand Falls mill, but denies that it was present in the island’s logging operations, thereby implying that logging operations should be studied as areas exploited by the mill town.

⁹Hayter, “The War in the Woods,” 707. For the trend in the labour history of forestry, see Roger Hayter, *Flexible Crossroads: The Restructuring of British Columbia’s Forest*

Economy (Vancouver: UBC Press, 2000); Ian Radforth, *Bush Workers and Bosses: Logging in Northern Ontario, 1900-1980* (Toronto: University of Toronto Press, 1987); Radforth, "Woodworkers and the Mechanization of the Pulpwood Logging Industry of Northern Ontario, 1950-1970," *Canadian Historical Association Papers* (1982); Radforth, "In the Bush: The Changing World of Work in Ontario's Pulpwood Logging Industry During the Twentieth Century," *Material History Bulletin* 19 (1984); Radforth, "Logging Pulpwood in Northern Ontario," in Craig Heron and Robert Storey, eds., *On the Job: Confronting the Labour Process in Canada* (Montreal, QC: McGill-Queen's University Press, 1986); Richard A. Rajala, *Clearcutting the Pacific Rain Forest: Production, Science, and Regulation* (Vancouver, BC: UBC Press, 1998); Rajala, "Bill and the Boss: Labour Protest, Technological Change, and the Transformation of the West Coast Logging Camp, 1890-1930," *Journal of Forest History* 33 (Autumn 1989); and Rajala, "The Forest as Factory: Technological Change and Worker Control in the West Coast Logging Industry, 1880-1930," *Labour/Le Travail* 32 (1993).

¹⁰Hayter, "War in the Woods," 707. The notions of "industrial core" versus "resource periphery" often deal with differing definitions of "power" and the actors of change. For an interesting discussion on this issue in the Newfoundland context, see Sean Cadigan, "Restructuring the Woods: Timber Rights, Power, and Agency in White Bay, Newfoundland, 1897-1959," in Peter R. Sinclair and Rosemary Ommers, eds., *Power and Restructuring: Canada's Coastal Society and Environment* (St. John's: ISER Books, 2006).

¹¹Richard Apostle, Gene Barrett, Petter Holm, Svein Jentoft, Leigh Mazany, Bonnie McCay, and Knut Mikalsen, *Community, State, and Market on the North Atlantic Rim: Challenges to Modernity in the Fisheries* (Toronto: University of Toronto Press, 1998), 24, 76-79, and 270-271. For further information on the transition in Newfoundland and Labrador from a salt-fish to a frozen-fish trade, see Miriam Wright, *A Fishery for Modern Times: The State and the Industrialization of the Newfoundland Fishery, 1934-1964* (Toronto: University of Toronto Press, 1998).

¹²Sutherland, "We are only loggers," 357-358. Sutherland barely mentions mechanization as an essential part of the companies' Fordist policies. However, he states that the "power saw, along with the IWA Strike, likely contributed to the introduction of fully mechanized logging systems in the 1960s" ("We are only loggers," 378).

¹³Those academics who examined resource-based regions as "resource peripheries" also treated loggers as extensions of companies' and governments' economic policies, further demonstrating the need for a better and broader understanding of the Fordist experience in resource-based regions.

¹⁴Raphael Kaplinsky, "Post-Fordist Industrial Restructuring: Some Policy Implications," in Jane Jenson, Rianne Mahon, and Manfred Bienefeld, eds., *Production, Space, Identity: Political Economy Faces the 21st Century* (Toronto: Canadian Scholars' Press, 1993), 26-27.

¹⁵John Curran, "The Process of Mechanization in the Forest Industry of Newfoundland: An Analysis of Technological Change and Worker Resistance to Change" (MA thesis, Memorial University of Newfoundland, 1971), 72-74 and 162-163.

¹⁶David Alexander, "Development and Dependence in Newfoundland, 1880-1970," *Acadiensis* 4 (Spring 1974), 7-12. See also W.G. Reeves, "Alexander's Conundrum Reconsidered: The American Dimension in Newfoundland Resource Development, 1898-1910," *Newfoundland Studies* 5 (Spring 1989), 2 and 23-26.

¹⁷John Munro, "Public Timber Allocation Policy in Newfoundland" (PhD thesis, University of British Columbia, 1978), 77.

¹⁸Munro, "Public Timber," 48 and 77, and James Hiller, "The Origins of the Pulp and Paper Industry in Newfoundland," *Acadiensis* 11 (Spring 1982).

¹⁹Harold Horwood, *Corner Brook: A Social History of a Paper Town* (St. John's, NL: Breakwater, 1986), 26-29, and Hiller, "The Politics of Newsprint: The Newfoundland Pulp and Paper Industry, 1919-1939," *Acadiensis* 19 (Spring 1990), 24, 26, and 34-35.

²⁰Marchak, *Green Gold*, 1-2 and 30. For further examples of Atlantic Canadian provincial governments relying on corporations for economic growth, particularly in the forestry sector, see Serge Cote, "Naissance de l'industrie papetiere et mainmise sur la foret: Le cas de Bathurst," in L. Anders Sandberg, ed., *Trouble in the Woods: Forest Policy and Social Conflict in Nova Scotia and New Brunswick* (Fredericton, NB: Acadiensis Press, 1992); Bill Parenteau and L. Anders Sandberg, "Conservation and the Gospel of Economic Nationalism: The Canadian Pulpwood Question in Nova Scotia and New Brunswick, 1918-1925," *Environmental History Review* 19 (1995); Parenteau, "Forest and Society in New Brunswick: The Political Economy of the Forest Industries, 1918-1939" (PhD thesis, University of New Brunswick, 1994); Parenteau, "The Woods Transformed: The Emergence of the Pulp and Paper Industry in New Brunswick, 1918-1931," *Acadiensis* 22 (1992); and Sandberg, "Introduction: Dependent Development and Client States: Forest Policy and Social Conflict in Nova Scotia and New Brunswick," in Sandberg, ed., *Trouble in the Woods*.

²¹For more information on the concessions granted by the Newfoundland government, see Hiller, "The Politics of Newsprint," 24, 26, and 34-35, and Hiller, "The Origins," 52-54. Also, for information on corporate/bureaucratic partnerships, see Michael M'Gonigle, "Structural Instruments and Sustainable Forests: A Political Ecology Approach," in Chris Tollefson, ed., *The Wealth of Forests: Markets, Regulation and Sustainable Forestry* (Vancouver, BC: UBC Press, 1998), 105-106.

²²Dufferin Sutherland, "Newfoundland Loggers Respond to the Great Depression," *Labour/Le Travail* 29 (Spring 1992), 84-85. See also Malcolm MacLeod, "A Death at Deer Lake: Catalyst of a Forgotten Newfoundland Strike, 1924," *Labour/Le Travail* 16 (Fall 1985); Dufferin Sutherland, "A Social History of Pulpwood Logging in Newfoundland During the Great Depression" (MA thesis, Memorial University of Newfoundland, 1988); and Sutherland, "'The Men Went to Work by the Stars and Returned by Them': The Experience of Work in the Newfoundland Woods During the 1930s," *Newfoundland Studies* 7 (Fall 1991).

²³Sutherland, "We are only loggers," 357.

²⁴Sutherland, "We are only loggers," 357.

²⁵Newfoundland Woods Labour Board Minutes [NWLBM], 45th Meeting, 1st Session, 29 April 1954, Archives and Manuscript Division, Queen Elizabeth II Library, Memorial University of Newfoundland [A&MD], COLL-110.

²⁶NWLBM, 45th Meeting, 1st Session, 29 April 1954, A&MD, COLL-110.

²⁷NWLBM, 49th Meeting, 4th Session, 15 March 1956, A&MD, COLL-110.

²⁸Anglo-Newfoundland Development Company, *Submission to Royal Commission to Investigate Conditions in the Wood Industry in Newfoundland* (Grand Falls, NL, 1960), 3.

²⁹NWLBM, 45th Meeting, 1st Session, 29 April 1954, A&MD, COLL-110.

³⁰NWLBM, 46th Meeting, 1st Session, 8 September 1954, A&MD, COLL-110.

³¹NWLBM, 46th Meeting, 1st Session, 8 September 1954, A&MD, COLL-110.

³²Sutherland, "We are only loggers," 48-49.

³³AND, *Pulpwood, A Multi-Million Dollar Industry: Newfoundland Loggers Enjoy the Highest Wage Scale in Eastern Canada*, 2nd ed. (Grand Falls, NL, 1958).

³⁴NWLBM, 46th Meeting, 4th Session, 9 September 1954, A&MD, COLL-110.

³⁵NWLBM, 50th Meeting, 3rd Session, 23 April 1956, A&MD, COLL-110.

³⁶NWLBM, 46th Meeting, 2nd Session, 8 September 1954, A&MD, COLL-110.

³⁷NWLBM, 48th Meeting, 4th Session, 19 November 1955, A&MD, COLL-110.

³⁸NWLBM, 50th Meeting, 3rd Session, 23 April 1956, A&MD, COLL-110.

³⁹NWLBM, 49th Meeting, 4th Session, 15 March 1956, A&MD, COLL-110.

⁴⁰NWLBM, 49th Meeting, 4th Session, 15 March 1956, A&MD, COLL-110.

⁴¹Collective agreements normally existed for only one year, but the unions had to sign a two-year agreement to obtain an increase of thirteen cents per cord.

⁴²NWLBM, 50th Meeting, 1st Session, 23 April 1956, A&MD, COLL-110.

⁴³NWLBM, 50th Meeting, 1st, 2nd, 3rd, 4th, and 5th Sessions, 23 and 24 April 1956, A&MD, COLL-110.

⁴⁴NWLBM, 50th Meeting, 6th Session, 25 April 1956, A&MD, COLL-110.

⁴⁵"Good wood" comprised of large trees that were well-spaced and on level ground. "Bad wood" was small trees that were either too close together or too far apart, growing on rough or boggy ground, or on hilly terrain. The term "medium wood" encompassed most working conditions between the two extremes of good and bad wood.

⁴⁶AND, *Submission to Royal Commission, 2*, and Bowater's Newfoundland Pulp and Paper Company, *Brief Submitted to the Royal Commission on Camp Logging Wages and Conditions* (Corner Brook, NL, 1960), 8.

⁴⁷*Report of the Commission of Enquiry on the Logging Industry* (St. John's, NL: Queen's Printer, 1960), 17. The Newfoundland government had appointed the commission to discover the causes of logger discontent and how it related to the IWA Strike of 1959.

⁴⁸The strike pitted loggers and the IWA against Joseph Smallwood's government and AND. Smallwood, who believed that the IWA was dominated by outsiders, banned the union after a police officer was killed during an altercation with loggers in Badger. While academics view the strike as a turning point in labour relations between the pulp and paper companies and loggers, because the quality of logging camps improved dramatically thereafter, the strike is not addressed in this paper. Further study needs to be conducted on the correlation between mechanization, the piecework pricing system, and the strike, but such a study is beyond the scope of this paper. For more information on the IWA Strike of 1959, see Bill Gillespie, *A Class Act: An Illustrated History of the Labour Movement in Newfoundland and Labrador* (St. John's, NL: Newfoundland and Labrador Federation of Labour, 1986), Chapter 8: The IWA Strike; H. Landon Ladd, "The Newfoundland Loggers' Strike of 1959," in W.J.C. Cherwinski and Gregory S. Kealey, eds., *Lectures in Canadian Labour and Working-Class History* (St. John's, NL: Committee on Canadian Labour History, 1985); Jerry Lembcke and William Tattam, *One Union in Wood: A Political History of the International Woodworkers of America* (Madeira Park, BC: Harbour Publishing, 1984), Chapter 7: The Legacy: Newfoundland and Laurel; Robert Paine, "The Mastery of Smallwood and Interlocutory Rhetoric," *Newfoundland Studies* 2 (Fall 1986); Paine, "Smallwood: Political Strategy and a Career of Rhetoric," *Newfoundland Studies* 3 (Fall 1987), these last two articles deal with the famous speech that Smallwood gave during the IWA strike; and Edward

Seymour, *An Illustrated History of Canadian Labour, 1800-1974*, 3rd ed. (Ottawa, ON: Canadian Labour Congress, 1987), 60-69.

⁴⁹*Report of the Commission*, 18-20, quotation from 30.

⁵⁰*Report of the Commission*, 32.

⁵¹*Report of the Commission*, 18-20.

⁵²*Report of the Commission*, 21.

⁵³AND, *Submission to Royal Commission*, 3.

⁵⁴*Report of the Commission*, 23.

⁵⁵*Report of the Commission*, 26-27. The percentages in this paragraph are derived from figures presented in the *Report of the Commission*.

⁵⁶For the methodology of the interviewing process, see Appendix A.

⁵⁷For more information on Kruger's acquisition of the Corner Brook mill, see Horwood, *Corner Brook*, 172-176.

⁵⁸Interview #7, Hampden, Newfoundland, June 2004.

⁵⁹Interview #9, Pollard's Point, Newfoundland, June 2004.

⁶⁰NWLB, 48th meeting, 1st session, 18 November 1955, A&MD, COLL-110.

⁶¹Some scholars have argued that pulp and paper companies employed the contractor system rather than company camps in order to avoid the industrial legality of the Fordist compact. For example, see W. Parenteau, "Bonded Labor: Canadian Woods Workers in the Maine Pulpwood Industry, 1940-55," *Forest and Conservation History* 37 (Summer 1993). The Maine pulp and paper companies used Canadian bonded workers as a source of cheap woods labour; there was no large-scale union system in Maine woods to fight such practices. In the case of Newfoundland, pulp and paper companies dealt with an island workforce since there was no outside source of cheap labour. Also, a large-scale union system was present and contractors were obligated (supposedly) by Bowater contracts to abide by the rulings of the WLB.

⁶²Bowaters, *Brief*, 7.

⁶³Interview #6, Sop's Arm, Newfoundland, June 2004.

⁶⁴Roland Gale, Hampden, Newfoundland, June 2004.

⁶⁵Daniel Wells, Hampden, Newfoundland, June 2004.

⁶⁶Wilfred Dyke, Jackson's Arm, Newfoundland, June 2004.

⁶⁷Daniel Wells, Hampden, Newfoundland, June 2004.

⁶⁸Lembcke and Tattam, *One Union in Wood*, 156.

⁶⁹*The Advertiser* (5 June 1905), A1.

⁷⁰*The Advertiser* (19 August 1954), B1.

⁷¹*The Advertiser* (5 July 1956), A4.

⁷²*The Advertiser* (26 July 1956), A7.

⁷³*The Advertiser* (16 August 1956), A4.

⁷⁴*The Newfoundland Logger* (August 1959), 3.

⁷⁵*The Newfoundland Logger* (November 1959), 7.

⁷⁶For example, "Statement by President to Shareholders about Annual Costs," *The Newfoundland Logger* (April 1960), 8-9.

⁷⁷The *Newfoundland Logger* stopped publication in December 1960 and merged with the *AND News*, the newsletter for mill workers, to form the *AND News-Log* the following month.

⁷⁸AND, *Our Heritage of Wooded Wealth* (Grand Falls, NL, 1957), 19.

⁷⁹The NBWW was created by Premier Joseph Smallwood, after he outlawed the IWA.

⁸⁰*Anglo-Newfoundland Development Company Memorandum*, W.J. Johnston to Sterling Thomas, President of the NBWW, 22 November 1960.

⁸¹NWLBM, 49th Meeting, 3rd Session, 14 March 1956, A&MD, COLL-110.

⁸²NWLBM, 51st Meeting, 1st Session, 14 January 1957, A&MD, COLL-110.

⁸³Munro, "Employment in Forest Industries in Newfoundland." Background notes for a talk given to the Newfoundland Association for Full Employment in St. John's, Newfoundland, February 1978, p. 3. It is interesting to note that 5,400 is the exact number that is listed in the *1955 Report of the Royal Commission on Forestry* for the year 1952. Although, the Commission stated that 5,400 does not represent the number of loggers employed in one year, but the man-years employed for that particular year. It also reported that three men working for four months could make up one man-year, and the Commission estimated that the number of loggers employed in the industry to be closer to 12,000 for all of 1952. It is likely that Munro misread the report. See *Report of the Royal Commission on Forestry* (St. John's, NL: Queen's Printer, 1955), 51.

⁸⁴Curran, "The Process of Mechanization," 4.

⁸⁵*Census of Canada* (Ottawa, ON: Dominion Bureau of Statistics, 1951), Vol. 4, Tables 19-21, 19-23 and 19-29. It should be noted that these figures are not being used as exact representations of the number of people employed in the pulp and paper industry. Since loggers were part-time workers in the 1950s, the number of people who would list themselves as "loggers" would vary. These figures are being used only to demonstrate the basic trends in employment figures within the industry. Furthermore, it is acknowledged that the introduction of skidders aided in further decreasing the number of employees needed for logging, though skidders were not used extensively in Newfoundland until the early to mid-1960s (Interview #6, Sop's Arm, Newfoundland, June 2004), suggesting that most of the decrease up to 1961 can be attributed to the introduction of power saws.

⁸⁶*Census of Canada* (Ottawa, ON: Dominion Bureau of Statistics, 1961), Vol. 3.2, Tables 9-25, 9-27 and 9-33.

⁸⁷*Census of Canada* (Ottawa, ON: Statistics Canada, 1971), Vol. 3.3, Tables 1-1 and 1-9.

⁸⁸Interview #6, Sop's Arm, Newfoundland, June 2004.

⁸⁹Leander Davis, Pollard's Point, Newfoundland, June 2004.

⁹⁰George Ford, Pollard's Point, Newfoundland, June 2004.

⁹¹Interview #9, Pollard's Point, Newfoundland, June 2004.

⁹²Robert Pittman, Sop's Arm, Newfoundland, June 2004.

⁹³Preliminary work has been completed on the relationship between Fordism and the depletion of Newfoundland's woodstands. See Mark McLaughlin, "Power Tools as Tools of Power: Mechanization in the Tree Harvest of the Newfoundland Pulp and Paper Industry," Final Master's Project, Memorial University of Newfoundland, 2004.

⁹⁴For more on the history of White Bay South's involvement with Newfoundland forest industries, see Sean Cadigan, "The Moral Economy of Retrenchment and Regeneration in the History of Rural Newfoundland," in Reginald Byron, ed., *Retrenchment and Regeneration in Rural Newfoundland* (Toronto, ON: University of Toronto Press, 2002).

APPENDIX A — METHODOLOGY FOR INTERVIEWS

The interviews were conducted in June 2004 by the author and Dr. Sean Cadigan as part of the Coasts Under Stress [CUS] Project. White Bay South was chosen as the location for the interviews because it was part of the CUS study area and had a long association with Newfoundland forest industries.⁹⁴ The author used a snowball sampling method to develop a list of interviewees. The local Regional Economic Development Boards were contacted for the procurement of an initial list. Once the author had gathered several names, they were contacted and asked to suggest other possible interviewees. Several interviews were arranged prior to our departure for White Bay South, then the others were arranged upon our arrival; we asked interviewees to provide names of other possible contacts. In total, eleven loggers were interviewed over ten sessions. A point was made to interview loggers from all four communities in White Bay South. Four interviewees declined to be identified, and are referred to by “Interview #” in the notes.

mark.mclaughlin@unb.ca