MAKING SENSE OF FORESTRY

A Review Essay

BY GORDON HAK

Tracks in the Forest: The Evolution of Logging Machinery
Ken Drushka and Hannu Konttinen

Tie Hackers to Timber Harvesters:
The History of Logging in the BC Interior
Ken Drushka

Troubles in the Rainforest:
British Columbia's Forest Economy in Transition
Trevor J. Barnes and Roger Hayter, editors

Clearcutting of the Pacific Rain Forest: Production, Science, and Regulation
Richard A. Rajala

Most of the writing in the 1990s about the history of forestry in British Columbia has been produced by Richard Rajala and Ken Drushka. A preoccupation of both is the development of logging equipment and harvesting techniques, the impact of logging processes on the forests and the broader society, and the place of government forest policy in these relationships. However, the two writers work different sides of the street. Drushka produces popular histories, shunning the protocols of scholarship, while Rajala appeals to the academic crowd.

Tracks in the Forest teams Drushka with co-author Hannu Konttinen in a book that details the history of mechanized logging equipment. The focus is on Finland, Sweden, the southern United States, and the smaller-
timber areas of Canada beyond British Columbia's coastal region. The book provides an effective, readable account of machinery developments, especially in the post–Second World War era. For those interested in understanding the development of feller bunchers and forward loaders, as well as the debate about where trees should be processed (at the roadside or at the stump), this book offers much. The 200 or so pictures of machinery, many in colour, are helpful to those unfamiliar with logging.

The project was underwritten by Timberjack, a Finnish logging equipment manufacturer, in celebration of the company's fiftieth anniversary. The heroes in the tale are the individuals and small companies that develop portable machines to facilitate the harvest of timber, and the small logging operators that use the machines in the woods. Large forest corporations are rarely mentioned, and when they are it is often in negative terms. For example, steam and railway logging were undertaken by well capitalized, large companies early in the twentieth century, but this merger of big capital and steam and railway logging, according to the authors, "as well as inflicting enormous destruction upon North American forests, was also unhealthy for the development of the kind of free enterprise economy based on individual initiative and innovation much needed in an evolving industry such as logging" (54).

Technological change is portrayed as a positive, evolutionary process that enables loggers to harvest trees more effectively for the good of society. Recently, equipment makers have produced environmentally sensitive machines and high-paying, skilled occupations for machine operators. Modern logging equipment is called "forest management machinery" (204), and workers who operate the expensive, sophisticated equipment are referred to as "professional" loggers (168). For a general comparative perspective, as well as an outline of links between logging and the equipment manufacturing sector, this book is informative.

Drushka's *Tie Hackers to Timber Harvesters* specifically examines the Interior of British Columbia. The title suggests a concentration on logging, but the book talks more about sawmilling and corporate ownership patterns. In essence, the book attempts a survey of the history of the industry in the Interior. Drushka's reluctance to consult scholarly literature and the weak sense of historical context give this ambitious work somewhat less shape and authority than have his books that concentrate on logging techniques and equipment. The history of the interior industry is defined by the company owners: foresters, lumber brokers, consumers, environmentalists, and governments are given short shrift. Workers and unions, too, are largely ignored; the rise of the province's first province-wide union of loggers just after the First World War is not even noted. The book was financed by a group of companies that operate in the Interior, and much of the information comes from interviews with lumbermen past and present.

Because there is so little historical work on the Interior, any additional knowledge is welcome, and this sketch of the development of the industry suggests many further lines of inquiry. The collection of photographs, more than 200, is a treat. The book is graced with an index, allowing potential purchasers to see if familiar names are mentioned in the text. Readers concerned with coastal British Columbia can refer to Drushka's popular history, *Working in the Woods: A History of Logging on the West Coast* (1992).
Richard Rajala's scholarly work will not have the same market as the Drushka books. Like Drushka, Rajala deals with logging technology, logging techniques, and change over time, but he is much more analytical. Rajala puts the power relation between capital and labour front and centre, explaining the adoption of logging techniques, the application of science, and the generation of forest policy in the context of capital's need to exploit labour and generate surplus. As Rajala notes, too often technological change in logging is portrayed as the heroic human attempt to overcome the difficulties of terrain and size in order to take out more and bigger trees. As such, Rajala is critical of the Drushka/Konttinen approach. Rajala sees the major corporations as the "most innovative sector in technology, in management and in moulding relations with government" (xxiii). Chronologically, the Rajala study goes from 1880 to 1965, and geographically it includes the coastal forests of Washington and Oregon States and the coastal region of British Columbia. The focus is on clear-cutting, the main method of harvesting trees. Corporate capital is the dominant actor; labour and the state play noteworthy but subordinate roles.

Two chapters explore the labour process associated with clear-cut logging. The development of labour-saving, deskilling technology to increase the exploitation of workers is at the heart of one chapter, while another shows the intersection of industry and the universities in developing skilled personnel to manage the workplace. Guided by the interests of large-scale capital, technology and science delivered the necessary supports for clear-cut logging, the most efficient and profitable method of forest harvesting, at least from the perspective of the owners.

Four succeeding chapters look at the logging regulation attempted by state, federal, and provincial governments. For Rajala, governments were clients of industry, and, this being the case, the interests of big business prevailed, despite some critical responses from within scientific and political institutions. He concludes that corporate, rather than ecological or social, interests were served by government regulation.

One of the book's strengths is its handling of the policy debates of the 1930s in Canada and the United States, a time when issues were focused (clear-cut versus selective logging) and interest groups were defined. The chapters on technological change and the emergence of logging engineering and industrial forestry are also rewarding. Some readers may be less convinced of Rajala's assumptions and conclusions. The power of a narrow focus on the exploitation of labour power in explaining the complex and diverse forest economy is open to question. Arguably, fluctuating labour and product markets, complex class and political considerations, and the rich social relations that intersected at production sites also played prominent roles. Further, Rajala argues strongly in defence of the main thrust of the Braverman thesis, making the case for skill dilution and the degradation of work in logging. But chronicling the "progressive narrowing of the task range and discretionary content of occupations, and outright elimination of so many others," is problematic. As Rajala notes, it is difficult to quantify (49-50). In another theme, the book shows that the science of forestry, when applied to clear-cutting and the problem of forest regeneration, was contested. However, controversy in science was hardly unusual, and the rightness of a particular theory of harvesting was not scientifically obvious.
The nature of scientific change, with the necessary context for a dramatic shift, is perhaps not sufficiently theorized here. Still, Rajala's contribution to our understanding of changes in the labour process; the relationship of science, capital, and technology; and the dynamics of government policy is impressive.

Trevor J. Barnes and Roger Hayter present fifteen essays on the contemporary provincial forest industry. Geographers, economists, political scientists, and company foresters (among others) contribute to the volume, and most have spoken out often on provincial forest policy. The book is divided into three sections, looking in turn at transitions in the forests, transitions in the industry, and transitions in resource communities. All authors acknowledge the dramatic changes that have occurred since 1970. Globalization, new production processes (post-Fordism), and environmental movements as well as resource depletion, First Nations claims, and the difficult circumstances of forestry workers and resource communities are part of the new reality. However, the reasons for this state of affairs and possible policies for the future are debated by the contributors. The argument that job loss is due to new technology, presented in one essay, is countered in another by the claim that job loss is a result of governments and environmentalists closing too much of the forests to logging companies. In separate essays, both visions of forestry (as a sunset industry and as an industry with a healthy future) have their advocates. The case for increased private ownership of the forests in one article is complemented by the call for more community or local control in another. This diversity of views is the strength of the volume, and it catches the flavour of the debates of the 1990s.

The papers are from a 1995 conference organized to celebrate the centenary of the birth of Harold Innis in 1894. While Innisian notions do not inform all the contributions directly, the editors emphasize the synthetic struggle in Innis's work: "the immensely difficult problem of integrating into a single account the diverse relations existing within resource industries: physical geography, institutions, markets, transportation, single-industry communities, and a core-periphery regional structure" (2).

The embrace of diverse relations suggests the merits of broad approaches to the recent and not-so-recent past in BC forestry. Most current studies focus on logging practices and government policy. This orientation would be enriched by more detailed analyses of business structures, investment sources, and product markets. Does externally based capital behave differently than local firms? Are smaller companies more innovative and sensitive to environmental concerns than larger firms? A lack of studies on the pulp and paper industry, plywood plants, and sawmilling, as well as institutions such as the British Columbia Truck Loggers Association and the unions, weaken all general interpretations of the industry. Further, spin-off industries like equipment manufacturing and consulting, ecological histories of particular forests, and the industry of the provincial interior demand greater attention.

For those interested in understanding the history of forestry and for those dedicated to changing existing patterns, the books mentioned here provide points of departure. Of course, as the intellectual debate goes on, trees are cut, the environment is altered, communities are transformed, and workers and their families endure uncertainty.