

FOREST HISTORY IN NEW ZEALAND: A REVIEW AND BIBLIOGRAPHY

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ABSTRACT

Consideration is given to the scope of forest history in New Zealand. Some alternative approaches are referred to and common attributes of contributors are outlined. Six major topics of forest history studies in New Zealand are discussed with suggestions for further research.

INTRODUCTION

It was observed, in a recent issue of the *N.Z. Journal of Forestry* that much of the forest history of this country has yet to be written (Holloway, 1981). The remark gained added poignancy with the death in 1981 of Arnold Hansson, formerly Chief Inspector of the fledgling State Forest Service during the 1920s. This severed one of the last major links with the successful establishment of scientific State forestry in New Zealand and, as his obituary notice observed, his personal contribution has not been recorded (Holloway, 1982). Forest history, with likely extensions of forest interpretation exercises for recreational programmes and with respect to the none too distant sequicentennial, is at a threshold. Some survey of past achievements and future prospects is timely. This paper endeavours to review the various contributions, and provide a bibliography of forest history in New Zealand. Some strengths and weaknesses are considered as well as possibilities for further historical studies of the New Zealand forest.

FOREST HISTORY IN NEW ZEALAND

Forest history as a research field encompasses a spectrum of man-forest relationships ranging from forest utilization, to forest policy and legislation, and to biographies of prominent personalities. This diversity is reflected in the variety of backgrounds of contributors where professional foresters, historians, geographers,

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and economists are commonly represented. Mantel (1964) identified nine distinct forest history research fields:

- Forest vegetation and timber industries
- Forestry education and research
- Biographies of forest managers and policy matters
- Forestry literature
- History of human influence on forests
- Forest utilization as a source of raw materials
- Forest management and development of silvicultural methods
- Forest legislation and past policy decisions
- Forest land ownership

Contributions to New Zealand forest history have explored many of these avenues, but few exhaustively. Other approaches put forward by Rakestraw (1979) include the perspectives of economic colonialism, regional planning, biography, and comparative frontiers. For many the multifaceted and sometimes contradictory relationships between man and the forest, whereby forest land was simultaneously prized for its resources but also regarded as a barrier to agricultural expansion, is of central concern (Sears, 1956: 4).

With the exception of Arnold (1976) and Stone (1973) who have demonstrated something of the importance of the timber industry in nineteenth century New Zealand and some theses (Beasley, 1930; Taylor, 1950; Wigglesworth, 1981), historians have directed their attention primarily to political and social questions (*e.g.*, Oliver, 1981). Instead, the forest has received more enduring, though still scattered and rarely systematic study from historical geographers.

Forests generally receive mention in the general and regional geographical overview where they comprise one important element of landscape change (Cumberland, 1941; Clark, 1949; McCaskill, 1960). Considerable attention has been focused upon reconstructing the pre-European vegetation patterns (Cumberland, 1941; Johnston, 1961; Forrest, 1963; Petrie, 1963; Murton, 1968; Johnston, 1969). The remaining efforts are diverse. Stokes (1966) compares the kauri timber industry of Northland with white pine lumbering in colonial New York during the late nineteenth and early nineteenth centuries. Shepard (1969) through settlers' diary accounts has investigated European responses to New Zealand environment. In this and in other studies the "bush" emerges as a powerful motif (Franklin, 1960; Johnston, 1981). The remaining efforts focus largely upon forest

policy and legislation. Wynn (1977b, 1979) examines in some detail the circumstances which led to the passage of a bold but thwarted New Zealand Forests Act in 1874. Roche (1983) has examined developments on a broader front from the first attempted reservation of kauri in 1841 to the establishment of an extensive exotic forest resource in the 1920s and 1930s.

Ventures into forest history in New Zealand have been largely the preserve of professional foresters. These writings, voluminous in comparison with the output of historians and historical geographers, include some lengthy reviews of forestry developments in New Zealand (Allsop, 1973; Poole, 1969; Simpson, 1973). Shorter essays on specific individuals and events (Clark, 1926; Coughlan, 1964; Brown and McKinnon, 1966; Brown, 1968; Barton, 1975), forest legislation (Foster, 1936, 1939; Boardman, 1938, 1940-41, 1942-44, 1951), and Maori impact on forests (Cameron 1961, 1964) have also appeared.

Rakestraw (1972) distinguishes between "academic" and "non-academic" contributors to conservation history. This distinction and the conclusions he draws about both groups are equally applicable to forest history in New Zealand. Rakestraw presents a sympathetic assessment of non-academic writers. He notes that they tend to be professional employees in the resource management field, who write from personal occupational experience. The academic author, Rakestraw adds, tends to have a liberal arts background, usually lacks humour in his writing, and is prone to over-generalise and over-simplify issues.

Non-academic contributions also display some limitations. Typically they may endeavour to justify the writer's actions and those of a particular department or institution. They may also slight historical sources and their organisation is sometimes inadequate. The advantages, which Rakestraw considers to outweigh these limitations, include a tolerance of human frailties, a feeling for landscape, an understanding of decision-making processes, and an ability to make professional judgements about technical questions. The special problem faced by academic writers primarily involve the interpretation of technical and scientific questions in essentially non-technical terms. In practice, the academic and non-academic contributions may complement each other.

Clearly there is ample scope for further contributions to forest history, for "few nineteenth century Western communities owed more to the forest harvest than did colonial New Zealand" (Arnold, 1976: 105). Specific areas of concern identified by Wynn include popular and official attitudes to land and resources

as revealed in the "development of forest policy in New Zealand" during the nineteenth century (1977a: 260) and the social and political dimensions of exotic tree planting during the 1920s and 1930s in view of its "enormous geographical impact" (1977a: 258). Yet forest history has been somewhat neglected by the academic author. Arnold suggests this is because forest history lacks "the obvious colour and drama" of the gold rushes and land wars (1976: 105). He is perhaps less accurate in contending that the "environmentalism" that characterised the 1970s will necessarily make the forest industries less attractive to researchers when indications are that conservation history is just arriving in New Zealand (Trussell, 1982; Nairn, 1983).

From the perspective of land settlement, the forest is already a familiar theme in New Zealand history. But this viewpoint has tended to overshadow other considerations. Only the widespread and usually wasteful forest clearance receives frequent mention. To more fully understand the pioneering phase and beyond, the forest ought to be examined on its own terms. The forest was a major component of the landscape, extending over half the country in 1840. By 1900 it had been reduced to about one-quarter of the land's surface. Within this context it seems equally valid to ask how and why some forest lands were not thrown open to settlement and to look at the associated policies and management strategies designed to achieve these ends, in an effort to comprehend the popular and official evaluations of forest resources in nineteenth century New Zealand.

MAJOR THEMES IN NEW ZEALAND FOREST HISTORY REVIEWED

Writers on forest history in New Zealand have ranged fairly widely. The following review and suggestions for further research uses six categories as a means of focusing the discussion.

(1) *The Maori and the Forest*

Pre-European Maori impact on the forests has to date received scant attention from a forest history perspective. Pioneering ethnological investigations by Best (1907, 1908, 1909) did, however, include material on the forest lore of the Maori. Cameron (1961, 1964) pays more specific attention to Maori land clearing for agricultural expansion. His papers provide a picture of deforestation that is at variance with the naive views of the past, intended as a mirror for a future utopia, presented by some writers (e.g., Trussell, 1982).

A major essay on the influence of prehistoric men on the forests by Cumberland (1962) heightened interest in this topic during the 1960s. Entitled "'Climatic change' or 'cultural interference'?" this lengthy paper in essence argued that Holloway's (1954) climatic change hypothesis did not give sufficient weight to fires lit by early polynesian inhabitants as an agent of deforestation. A rejoinder was subsequently published by Holloway (1964).

(2) *Forest Vegetation Reconstruction*

Several studies have endeavoured to map the pre-European vegetation patterns in New Zealand. Geographical and botanical rationales underlie the majority of these efforts. Cumberland's (1941) reconstruction, on a national scale, of the vegetation patterns *circa* 1840 has been subsequently updated by McLintock (1959) and Wards (1976). Some regional studies have also been undertaken. Canterbury has received considerable attention (Johnston 1961, 1969; Petrie, 1963). Others have examined coastal Otago (Forrest, 1963), Poverty Bay (Murton, 1968) and more recently Northland (Beever, 1981). Incidental details from a variety of early land surveys provide the basic data for this type of study.

These efforts provide some indication of the vegetation patterns before extensive modification was wrought by European settlement. Historical geographers who provided the majority of these studies have, in keeping with methodological developments within the sub-discipline, turned from static reconstructions of the past to other concerns. Hence Arnold's (1971) insistence that they should provide a series of maps depicting the retreat of the North Island bushline in 1870, 1880 and 1890 is unlikely to be heeded. Certainly much untapped material exists, some of it in published official papers. For example, reports in the British Parliamentary Papers (Colonies) of the war in Taranaki during the 1850s and 1860s contain a number of military maps which indicate the bushline in some considerable detail.

(3) *Forest Landscapes*

To date, little attention has been focused upon the reaction of European settlers to the forest component of their new antipodean environment. One account, based on early diaries, emphasises that two prominent motifs are the Maori pa and the forest (Shephard, 1969). The genesis of the term "bush" to specifically describe the New Zealand forests has also been traced (Johnston,

1981). Although great efforts were directed towards deforestation for agricultural expansion, once settlement was established the somewhat scarce "bush", no longer a threat, became valued for its aesthetic appeal. Thus, the earliest efforts at scenery preservation which date from the late nineteenth century display a considerable bias towards forest landscapes. This subsequently produced an imbalance in the types of areas represented in Scenic Reserves today (Roche, 1981).

(4) *The Timber Industry*

The timber industry, which receives minimal attention in the standard historical accounts of New Zealand's past, has attracted some detailed investigation by research students (Beasley, 1930; Taylor, 1950; Petrie, 1963; Wigglesworth, 1981). Other academic writers include Stokes (1966), Stone (1973) and Arnold (1976). Their work complements that of Reed (1952), Ward (1967) and Simpson (1973). Two papers stand out as being particularly incisive. Arnold, in an examination of the forest harvest in the Manawatu, highlights the importance of wood as a general and specialist building material and for emphasis lists some of the various wood-using tradesmen. He also argues that the forest industry was an important transitional employer prior to involvement in the meat and dairy industries in the 1880s. Stone (1973) in the context of the nineteenth century Auckland building community, develops linkages between city capital and the kauri timber industry in Northland. Both these studies provide examples of research based on other than the usual rural development perspective.

Many questions concerning the timber industry in the nineteenth and early twentieth century remain unanswered. For instance, Thomas Kirk, the Chief Conservator of Forests, outlined in 1886 his hopes that a sustainable forest industry would develop in both Northland and Southland. These aspirations were not realised and although the story of kauri exploitation in Northland may be pieced together little special consideration beyond local histories has been given to the course of forestry in Southland. Of perhaps greater importance is the crisis in confidence that afflicted the timber industry, a leading industrial employer, from the late nineteenth century until World War 1. Essentially this was related to fears of an impending timber famine. Studies of the declining years of an industry are equal in importance to those of establishment and growth, but tend to be pursued less frequently.

(5) *Forest Policy and Management*

Forest policy and management, with an emphasis on the various attempts to establish State forestry in New Zealand, has attracted attention from both professional foresters and academic writers. However, these studies are too frequently faulty in regarding Julius Vogel's bold State Forest Act of 1874 as the effective starting point for forest management (Coughlan, 1964; Allsop, 1973; Poole, 1969; Simpson, 1973; Wynn, 1977b, 1979). However, forestry legislation and regulations in New Zealand predate Vogel's initiatives (Boardman, 1938, 1951). Even the appointment of Captain William Symonds as Conservator of Kauri Forests in 1841 has escaped general attention (Roche, in press). Similarly, management strategies such as timber licensing and timber reserves, which date from the 1850s, have attracted scant consideration (Roche, 1983, 1985). The twentieth century has also received uneven treatment. Various writers have championed the contribution of individuals such as Sir Francis Bell (Stewart, 1937), Sir James Wilson (Wild, 1953) and Sir David Hutchins (Roche, 1983) in the formation of an independent forests department in 1919. But apart from some peripheral issues (Foster, 1936, 1939), the early years of the State Forest Service, under the directorship of Leon McIntosh Ellis, remain largely unexplored, even though an exotic forest resource of unprecedented extent was planned and created during the mid-1920s. The lengthy directorship of Alex Entrican (1939-61) included planning for the utilisation of the 1920s plantings and the early consideration for a second planting boom which began in the 1960s and will be tapered off by the late 1980s. Again, there is scope for much research on various aspects of Entrican's directorship.

(6) *Afforestation*

The establishment of exotic state forests late in the nineteenth century which accelerated into a planting boom during the 1920s and 1930s has been recorded in the standard and in some shorter accounts (Barnett, 1946; Cooney, 1949; Allsop, 1973; Poole, 1969; Simpson, 1973). Various considerations for exotic forests' location have also been summarised by Allsop (1965). The boldness of the sudden expansion of exotic planting in the mid-1920s is generally appreciated and Ellis' (1935) retrospective comments on these events are also pertinent. However, to date there is an incomplete understanding. Roche (1983, 1984) examines some dimensions of private afforestation activity from

the 1870s to 1890s, but a detailed analysis of the impact of the Forest Trees Planting Encouragement Act of 1871 has not been undertaken. Nineteenth century beliefs about forests enhancing rainfall were also a powerful factor in encouraging plantings in some of the treeless region of the South Island.

State involvement in afforestation from the late 1890s should also be placed in context with growing fears about imminent exhaustion of the indigenous forests as well as concern over their growth and regeneration of the latter. In addition, many years of informal experimentation had shown the potential for growing exotic species in New Zealand (Bannister, 1973). However, the State's involvement in establishing exotic plantations during the 1920s has tended to overshadow the concurrent planting of sizable approximately equivalent areas by bond-issuing afforestation companies (Hart, 1966; Healy, 1982). The history of private sector afforestation and its relationships to the State Forest Service has yet to be written.

CONCLUSION

Research into forest history in New Zealand displays considerable diversity. In part this reflects the range of background of the various authors. Nevertheless, little of the research to date has been exhaustive and whole topics remain untouched. It is now over 60 years since an independent forest service was established in New Zealand. The opportunity to record and interpret the events of the early years with direct reference to those involved in these affairs is rapidly eluding everyone interested in forest history. Is it not time for forestry sector agencies to sponsor this research before the opportunity is lost?

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