



# NEW INFORMATION



## BOOK REVIEWS

### 'PRACTICAL WATER POWER'

by J.L. HARRISON-SMITH

The subject of this book, deriving useful power from water, is a very relevant interest for foresters. In managing forests the profession has the control of water yield and quality amongst its principal objectives. The sawmilling and logging industries have had a long and rewarding association with dams, flumes and water wheels. Foresters moreover deserve reminding that the combination of the words 'forests' and 'energy' need not necessarily imply ethanol, methanol, charcoal or firewood.

Jack Harrison-Smith, the author, is a retired forester and a long-standing member of the Institute. He is an enthusiastic inventor and author, with numerous contributions to farming and forestry periodicals to his credit. His most recent communication to the journal was a letter commending the new style and format. Inevitably one is inclined to review 'Practical Water Power' by these same expressed standards.

In style and content the book is commendable, and reaches the happy compromise of being not overladen with technical detail, nor too brief. Equally it does not . . . " . . . give exact dimensions for anyone wanting to follow them parrot-fashion . . . not a great deal of help for the man who wants to do his own thinking . . . " (p.65).

Mathematical formulae, with which the field of water power abounds, are clearly set out with worked examples in both imperial and metric units throughout. The photographic illustrations are also well composed, with each clearly portraying the object of interest.

'Practical Water Power' does, however, deserve a better presentation. While there is no need for A4 dimensions — the smaller size is more convenient — the typeface and line drawings are somewhat rough. Admittedly a homespun appearance reinforces the practical, self-reliant spirit. It may also detract from the first impressions of those deciding whether to read the book further and whether to buy it.

'Practical Water Power' is then a most useful addition to the resourceful forester's library. There might yet be some hope that

with smaller, more localized energy generation we may be spared some of the unsightly, unproductive swathes through our forests that accompany high voltage long-distance reticulation.

W.B. Liley

### 'PLANTATION FORESTRY WITH *PINUS RADIATA*'

Plantation forestry with *Pinus radiata*, Peter B. Lavery, 1986. Paper No. 12, School of Forestry, University of Canterbury, 255p. (\$22 including G.S.T.).

This publication has been prepared from papers and material assembled by an Australian forester, Peter Lavery, whilst he was studying at the Canterbury School of Forestry on a postgraduate Commonwealth Scholarship. As Peter points out in his preface, the "Review Papers" was not conceived as an integrated document. It consists essentially of selective literature reviews on three broad aspects of radiata plantation forestry.

- Section I Current Status, Prospects, and Management Strategies.
- Section II Growth Characteristics, Wood Properties and Outturn Relationships.
- Section III Environment and Growth, Plantation Stand Classification and Productivity Rating.

Each section is treated as a separate entity with its own bibliography. The reader is forewarned that the reviews are not a complete coverage of the literature: rather they are a forestry practitioner's interpretation of the literature available to him that he found relevant and interesting. He does not purport to be a specialist in the subject areas covered. Emphasis has been placed on Australasian research literature and practices but reference is made to South African, Chilean, Spanish and other relevant literature where appropriate to provide a more balanced global perspective.

Within the above qualifications, the review papers will provide useful source material for students and for practising foresters seeking to update their knowledge. The first section on the status of radiata pine as an exotic and an alternative management option will have widest appeal. His commentary on limiting environmental factors and on understanding the reasons for radiata pine's success covers ground that has been rather poorly covered in the literature.

It is his appraisal of management options though, that will be of most interest to foresters. The differences in approach and practice that exist between the Australian States and New Zealand must be confusing to outside observers, so a review that aims at clarifying the rationale and circumstances for each strategy and practice should have a wide audience. Peter Lavery begins by endeavouring to clarify the confusion in terminology and nomenclature that exists by presenting a classification that clearly distinguishes between management regimes and silvicultural schedules, the former being the ends and the latter the means.

New Zealanders will be particularly interested to read how an Australian silviculturist sees the New Zealand scene. At the outset of his overview, Peter observes that in the last 20 years New Zealand management of radiata pine has diverged — or evolved — considerably from the more traditional style of plantation management previously practised here, and still practised widely in Australia. It is a pity he did not follow up this line of enquiry. His trans-Tasman comparisons and appraisal would have been more valuable had he analysed more thoroughly the reasons why this divergence occurred, examined whether or not it was evolutionary or merely divergence to suit changing circumstances, and speculated on why Chilean foresters are rapidly adopting New Zealand approaches and technology, whereas Australian foresters by and large are not. I felt this important section lacked a well-reasoned conclusion.

Sections II and III could be regarded as appendices for Section I, providing much of the technical background needed for evaluating the performance of radiata pine plantations, examining alternative management strategies, and deriving silvicultural schedules. Both reviews have been competently done and general conclusions drawn. In his final section on appropriate site classification systems for radiata pine, it is readily apparent that the author is on his home ground.

E.H. Bunn

### TE WHAONUI O TANE Indigenous Forests of New Zealand

Compiled by V. Froude, A. Gibson, and B. Carlin. 1985. Issues and Options paper 1985/1. Commission for the Environment, Wellington, NZ.

This publication is the last of a series of Issues and Options papers prepared by the Commission for the Environment.

It is a review of: The history of New Zealand forests since pre-European times to

the present day; the diverse legislation pertaining to forests and the management of natural lands in this century; an identification of values, issues and conflicts which require recognition and resolution.

This review publication attempted to:

- Assess the present status of New Zealand indigenous forests.
- Identify public attitudes towards the indigenous forests.
- Review existing policies and legislative structures pertaining to indigenous forests.
- Identify possible options for improved indigenous forest management.

The key issues identified and discussed include:

- insufficient representation of lowland forest reserves, especially in the North Island, even though the total reservation of land in New Zealand compared favourably with other developed countries;
- regional economies versus the 'national interest' result in conflict over the management of forests in several localities;
- duplication of systems providing for the protection of land administered by Crown agencies;
- inadequate knowledge and techniques to allow forest managers to demonstrate that sustained yield management can be practised;
- there is disagreement over the proportion of the remaining Crown-owned indigenous forest which should be managed for the production of timber;
- the 1977 Indigenous Forest Policy for state forests has not been adopted by other land-administering agencies;
- fiscal policies have in the past encouraged the clearance of indigenous forests;
- there has been inadequate definition of what constitutes 'indigenous forest', to provide a consistent interpretation of management policies;
- the impact of forest removal on wildlife values has not been sufficiently recognized or reflected in legislation.

The paper culminates in a raft of options which the authors suggest will improve native forest management in the future. Although there are too many to list, some deserving of mention are:

- The Indigenous Forest Policy should be reviewed and formally adopted by all agencies administering publicly-owned native forest lands.
- Maori and other private land owners

should be offered compensation to provide an incentive for them to protect important forest areas.

- Revenue generated from indigenous timber sales should contribute to a fund to increase management research.
- Government should establish fiscal policies which do not encourage clearance of indigenous forest.
- Government needs to increase funding for the purchase of protected reserves.

Generally this publication is well researched and it provides a useful, comprehensive coverage of the subject, although there are a few areas where the emphasis is questionable. Many of the options outlined make sense but require commitments, both financial and political, that Government might be loathe to take up.

A.D. Griffiths

## 'THINK TREES GROW TREES'

Published by the Australian Government Publishing Service, Canberra, 1985, for the Commonwealth Department of Arts, Heritage and Environment. 210 pp.

This book, which was prepared in collaboration with the Australian Institute of Foresters, is aimed at a broad readership including most land owners and land managers, as well as tertiary and senior secondary students. The objective is to stimulate these people to *think* and to grow trees for the protection, enhancement and survival of Australia's land and culture. To this end the book contains 14 chapters written by no fewer than 16 authors, many (but not all) of them professional foresters. Between them, they cover most aspects of tree growing in Australia with the exception of large-scale commercial forestry.

At a casual glance, the chapters appear to be unrelated to one another and of varying quality and interest — at least to a New Zealander. However, closer examination shows that in spite of such diverse headings as "Living with fire", "What's wrong with that tree?", "Forestry — what future?", the editorial committee has largely succeeded in achieving its ambitious objectives. All chapters are clearly written and lacking in the jargon all too common in forestry literature: none is superficial and most strike a nice balance between discussion of generalities and the presentation of factual detail. And to cap it all, the 12 very different topics *do* hang together, at least loosely, in a logical parcel tied together by the introductory and concluding chapters by Peter Stevens.

No less important in achieving its appeal to a wide readership, the book is lavishly illustrated, superbly edited and printed, and sells for the remarkably cheap price of \$A19.95 including postage (or \$A24 if you want the case-bound edition).

Obviously, a book such as this is not entirely relevant to forestry in New Zealand: nevertheless I strongly recommend its purchase for several reasons. Firstly, "Think trees grow trees" concentrates on general principles which apply anywhere in Australia; so many are also applicable to New Zealand. Secondly, this book might encourage us in this country to continue discussing multiple-use forestry, farm forestry, urban forestry and other important topics that should not be allowed to wilt in the present politically inspired drought. Finally, where else can you buy interesting and entertaining bed-time reading so cheaply?

J.D. Allen

### REVIEWERS

N.Z. Forestry would like to thank the following who have reviewed articles published in Vol. 31.

P. Brown	F. Maplesden
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	M. Williamson
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## N.Z. Forestry Council — publications noted

Working Paper No. 31 A National Exotic Forest Description System by H. Stewart & G. Burrows. June 1986

Working Paper No. 8. Utilization and Marketing Prospects for Special Purpose Species. October 1986.

### CLASSIFIED ADVERTISEMENTS

It is intended to publish classified advertisements in future issues. These could cover positions wanted and positions available in forestry, courses, meetings and other services. A charge of \$5.00 per single column centimetre will be made for such advertisements.