relates the text to various forestry issues and, in particular, the ongoing development of a practical example should greatly assist readers in relating the issues discussed to their own particular framework. This reviewer's experience is that many of the issues covered in both the book in general, and the worked examples in particular, are directly relevant to real world situations.

As a Chartered Accountant with a strong involvement in forestry, I was particularly impressed by the emphasis of the author in continually highlighting to the reader the requirement to consider the cost benefit of both the budgeting and accounting information to be produced. Experience suggests these issues are frequently overlooked by management at all levels and the ongoing emphasis on this most fundamental of concepts is highly desirable.

The book concludes with a useful analysis of its contents in relation to New Zealand prepared by Edward Bilek of the School of Forestry, University of Canterbury. In particular should be noted the desirability of reading the Valuation chapter in conjunction with the New Zealand Institute of Forestry guidelines on valuation.

The Glossary of Terms will undoubtedly be of assistance to those confused by jargon, and the book is very well indexed.

In summary, I believe this book provides a very useful introductory text for those considering a career in forestry management and needing a clear understanding of fundamental accounting principles and their relevance to forestry management. My experience is that the book would be very appropriate both for students, and for many existing forestry managers.

Mark Blackburne

Iles & Campbell Limited
P. O. Box 716

Taupo

PINES OF SILVICULTURAL IMPORTANCE

Compiled from the Forestry Compendium

CABI Publishing, Oxon. 2002. 608 p. ISBN 0 85199 539 X. Hardback. £85 (US\$149.00)

What soil types are suitable for *Pinus muricata*? Is possum-browsing (in New Zealand) a problem with *P. pinea*? What is the natural distribution of *P. edulis*? Is there any prospect for the commercial use of *P. torreyana* or *P. pseudostrobus*?

How would you go about answering such questions?

Well, you could buy this book. The first problem is the cost: at over NZ\$350, the information does not come cheaply. And office bookshelf space cannot be considered free, and then — if you are like many of my colleagues who are forced to move offices frequently — a large personal library can actually be a liability. To use this book as a personal reference, you have to first remember that you own it, and secondly recall exactly where you filed it and

what sort of information it is likely to contain. The alternative approach is to use the internet (more later).

When you have bought the book, you will no doubt read the general introduction to pines, by Dr Rowland Burdon. As could be expected from this author, the work is scholarly and breathtaking, even awe-inspiring, in its comprehensiveness. The same goes for the chapter on *P. radiata* by the same author. The only quibble: "However, some of the adverse effects of the more radical [i.e., direct clearwood] regimes on wood and timber quality are proving greater than anticipated, which is causing a rethinking of the regimes and a focus on genetic improvement of wood properties". I agree, provided that the "rethinking" is not merely a reversion to older fashions of very high stockings, ultra-long rotations, and the absence of pruning. Such a move is just not happening.

The value of this book can be compared with information freely available on the internet. Unlike heavy bulky books, the internet is accessible at your fingertips wherever you have a computer and a modem. The old arguments about the pleasures of reading a book in a deckchair or the sofa do not apply in this case, where the qualities of each pine are listed often in tabular form: it is a reference book, and not designed for reading pleasure.

To test the merits of the book, I ran some internet searches using the wonderful (and free!) meta-search engine Copernic.com, which scans eight search engines simultaneously. These are the results:

What soil types are best suited to P.muricata?

The book took half a minute to find the most useful (and I think correct) information that "ideal sites for *P.muricata* growth are those areas with uniform or winter rainfall and porous sandy or sandy-loam soils. Growth is less satisfactory on heavy badly drained clays. Although the species tolerates acidic soils and water-logging better than *P. radiata*, growth rates are nevertheless poor under these conditions." The internet search took 29 sec to obtain 50 hits, but another 2 min 49 sec and four wrong leads to obtain much the same information.

Score: book 10, internet 8.

Is possum browsing of P. pinea a problem in New Zealand?

The book was of no help because it was written for an international audience and so (naturally) does not mention local problems. But local problems can be critically important for any practitioner. Some 27 seconds on the internet, using the key words *Pinus pinea* and *possum*, obtained 44 hits. 1 min 21 sec took me to an Australian Tree Crops newsletter dedicated to *P. pinea*, and which was written by a New Zealander. Amazingly, this did not mention possums. On the other hand, another 2 minutes gave me the e-mail address of a New Zealander who grew *P. pinea* commercially and (elsewhere) deplored the ravages of possums. So it allowed the possibility of fruitful further inquiry.

Score: book 0, internet 2.

What is the natural distribution of *P. edulis*?

The book gave a good verbal description: "...extends across semi-arid lower montane slopes of the Intermountain Ranges..." but no map! And this is a general criticism of the book. Illustrations are sparse and always in black and white. Whereas on the internet,

in less than a minute I found stunning and detailed colour photos ("a picture is worth 1000 words") of *P.edulis*, complete with a good map and verbal description of the natural distribution.

Score: book 5, internet 10.

What is the potential for *P. torreyana* and *P. pseudostrobus* as commercial species?

The book did not mention *torreyana*, which was a pity since it would have been possible to double the species covered and thus construct a truly comprehensive reference book. *Pseudostrobus* is briefly described as having been tried in South Africa, Brazil, and Columbia but rejected because of slow growth rates. Using the key word "potential" the internet quickly located a site that enabled me to subscribe to an agroforestry newsletter about the potential of new species, and the key reference for the discussion on *torreyana*. It would cost about NZ\$50 for a subscription, so I aborted the search. A similar search for *pseudostrobus* was disappointing.

Score: book 3, internet 2.

So what lessons can be learned from this exercise? Firstly, that reference books such as the one reviewed here face a very real threat from the internet. Secondly, if an author or publisher wants to get the information out to the widest readership, it may be necessary to forgo royalties and publish in electronic form, perhaps in addition to hard copy.

Piers Maclaren Piers Maclaren & Associates Ltd 115 East Belt Rangiora

UNASYLVA 1947–2000: AN INTERNATIONAL JOURNAL OF FORESTRY AND FOREST INDUSTRIES

Compact Disc. FAO, Rome. 2000. ISBN 92-5-004529-8. US\$40.00

System requirements: Windows 95 / 98 / NT Minimum: Pentium PC, 16 MB RAM, CD-ROM drive

Having all the issues of Unasylva (from 1947 to 2000) on the one CD offered some exciting search prospects.

I am not a computer expert but my computer knowledge and usage would be typical of at least some of those most likely to use the Unasylva CD. An initial disappointment came when I found that the CD would not run on my Macintosh computer (unless I "converted" my Mac to a PC with a programme called Virtual PC).

As a record of Unasylva the CD is very good. Unasylva is printed in three languages (English, French, and Spanish) but the early issues were not available in Spanish. As the screen letter size of the articles is large and bold, articles are easy to read. The layout (which includes photographs, tables, graphs, etc.) is exactly as is published in the hard copies of Unasylva.