Reviews

P M Tabbush *Silvicultural Principles for Upland Restocking.* Forestry Commission Bulletin 76, HMSO, 1988 pp. 22, 24.5 x 19 cm, 12 colour photographs, 10 tables and diagrams. Price £3.50

Review by G J Mayhead

Gear-felling areas will rise substantially in Britain in the next decade from an estimated 9,700 ha per annum in 1988/89 to 16,300 ha in 1988/89. This lavishly produced Forestry Commission Bulletin makes a substantial contribution towards providing the factual and quantitative basis for successful restocking programmes. Both students and managers will find this to be excellent reading.

Plant quality is discussed and a good set of colour photographs illustrates the range of morphological quality encountered; it is perhaps a little unfortunate that despite the inclusion of a scale ruler the relative sizes of transplant could still be clearer. The concept of Root Growth Potential (RGP) is explained and a photograph provides a demonstration of how a field manager might undertake his own RGP tests. It is probably rather too optimistic to tell him that with a root temperature of 20°C, 16 hour days and high light intensity, the RGP of Sitka Spruce after 14 days should exceed 10 new roots of greater than 1 cm length per transplant. Crude RGP trials do however, work and I endorse the idea of RGP testing at forest level.

The problems of plant handling and storage between nursery and forest area are covered and usefully quantified for quick reference. A diagram summarises the optimum months for the lifting, cold storing, canopy storing and planting of Sitka spruce or Douglas fir: excellent for the manager in planning and for day-to-day operations; this was however available in Research Information Note 118/87/SILN.

Another section deals with site preparation. Scarification is still a mystery to many foresters and the machinery photographs, descriptions and quantifications here will be useful: desirable mounds are 20–30 cm high and of 75–100 litres!

There is some slight confusion in discussion over the importance of weed root competition in reducing tree growth but finally it is said that chemical weed control ‘is much to be preferred’.

The Bulletin clearly lights the way to better tree survival and lower beating up costs; it is to be hoped managers can implement the recommendations.


Review by J A Johnson

It is a salutory fact that decision-making does not come easily to many people. Whether the range of choice is too wide or the information source too narrow certainty is rarely a prominent feature in seeking the right decision. Forest management means that decisions have to be made and this book provides the traditional, ‘grass-roots’ formulae for attempting such decision-making.

The chosen route of the author is classical and orientated towards U.K. foresters although the theoretical concepts have validity elsewhere. The first two-thirds of the book is devoted to criteria and tools to be used in the decision-making process. These are described in a fashion which is sufficiently ‘reader-friendly’ to allow the individual to follow the train of thought used in arriving at empirical answers to questions such as how much should be spent on cultivation, ground preparation or fertilisers? What type of thinning should be carried out? What is the optimum length of rotation for a
particular species on a particular site? Those who fear that they must grimly determine to confront the often arid subjects of interest rates, discounting, the influence of time and profit criteria, will be relieved to find that the experience is short-lived, treatment of each subject being striking in its simplicity and brevity. The final third of the book is given over to the application of these economic criteria to the choice of decision when a range of suitable options exists. The author deals with this in a logical fashion, concentrating on the major management tasks of planting, site improvement, thinning, felling and pruning. The text, which is concise and digestible, is liberally seasoned with tables, diagrams and examples, managing to remain relatively free of jargon.

The fact that this book is sponsored by the Royal Forestry Society and is into its second edition reminds us as much that the Society has an important promotional role as that the subject of forest management is constantly changing. It is therefore disappointing to find that the original text is little updated or altered and the bibliography hardly does justice to the literature available. Three new chapters on computing in forestry have been inserted, and one chapter on roading decisions deleted, but otherwise there is little substantive change. This would be of lesser concern if nothing of significance was happening in the subject. Those in the forestry profession, however, ought to beware. The subject of decision-making in forest management, so firmly embedded in forest economics, has moved on substantially and particularly during the last ten years. It is no longer passable to present neat, packaged answers to the many questions facing the forest manager without at least some hint of the complexity of issues beyond these. Unqualified statements such as 'obviously the cost of exploiting natural forest is far less than that of artificially established plantations' can no longer sit comfortably in a textbook aimed at today's generation of foresters. The bounds of traditional decision-making in forest management are losing their definition. Straightforward financial choices rarely seem to exist any more. Economists know this; foresters are becoming, all too often, painfully aware of this, and forest economists have the unpleasant task of admitting there is a problem here and making a stab at its resolution. In this respect Michael William's book does not go far enough.

Since the second edition follows so closely the wording of the first it is surprising to find that cross-checking and editing have not been carried out as thoroughly as might be hoped. Most of the errors are trivial but they ought not to be there at all. Fortuitously, the author avoids taxation in his calculations of profit so that the examples are not made obsolete by the 1988 Budget. The same can not be said of references to grants, the author suffering the liability borne by all writers that some of the information conveyed is thrown out of date whilst in press. It is also unfortunate that the occasional imposition of updated figures on the original late 1970s figures, as supplied in the examples, proves inconsistent and, at times, confusing. This is particularly noticeable in Section 4.3 where the text and the figures simply do not match up. It is, in any case, a weakness to leave dated figures in a revised edition; this only serves to compound the popular impression that nothing ever changes in forest management: something which is actually rather far from the truth.

Despite these drawbacks the essentially pragmatic, empirical nature of the book will mean that it will have an established place as an introductory reading for the aspiring forestry practitioner. The thread of common sense running through the book will widen its appeal. Specialists will find it of limited value but those wishing to take their first plunge into the pool of knowledge on forest management and decision-making will find that this book provides an effective way in.