

THE ECOLOGY OF EVEN-AGED FOREST PLANTATIONS

E. D. Ford, D. C. Malcolm and J. Atterson, editors.

Proceedings of the Meeting of Division 1, International Union of Forestry Research Organisations, Edinburgh, September 1978. Institute of Terrestrial Ecology, Cambridge. 582 pages.

Of the 30 papers contained in this book only one attempts to inspire the reader. John Davies, Forestry Commission Conservator for Southern Scotland, writing not on the ecology but on the management of even-aged plantations is the author of a stirring plea for high input forestry. His paper, although it contains sometimes outrageous generalisations and over-simplification has a clear message: "the time has come for the general manager to weld all these (the conclusions of research

workers) together and, like the great Victorian scientists such as Darwin, who could see all creation as one, prescribe a comprehensive, if somewhat imperfect treatment, simple and clear." The contrast with the measured assertions and qualified statements of so many other papers in this volume is striking and forces one to consider the role of forestry research and how research can best contribute to better management. Davies' approach is a reproof to the cautious scientist and calls to mind the words of Cardinal Newman: "A man would do nothing if he waited until he could do it so well that none would find fault with what he has done."

The papers presented at this conference cover every conceivable aspect of the subject. Unfortunately the end product is very uneven. Often a pretentious title, suggestive of a definitive review, is followed by a disappointingly limited discussion of a handful of experiments in Scotland. Many of the contributions are pedestrian, quite a few are competent and informative but only rarely do they inspire or stimulate. We are told that even-aged plantations are now found throughout the world, that fertilizers are used in forestry in a great many countries, that exotic species are used extensively. What a pity then that 24 of the 33 invited contributions were from one country (Great Britain) and that one or two of the "foreign" contributions were of a particularly low standard. The broad coverage suggested by the title of the conference is quite misleading. For example, apart from Kormanik's contribution on the mycorrhizal work of the USDA Forest Service at Athens, Georgia, work much promulgated often more elegantly than on this occasion, there was no paper dealing with plantation forestry in the southeastern United States. This was disappointing considering the very excellent and interesting work being done there by the Forest Service, universities and other private companies in for example North Carolina and Florida.

These criticisms, while displaying a general dissatisfaction with the proceedings of this conference, should not detract from the value of a number of excellent contributions. Of the two papers on site classification, that of Kreutzer provides a useful review of the factors involved in stand productivity estimation procedures. Both this paper and the other by Toleman discuss site productivity estimation on non-forested land, an important subject, but one which has received relatively little attention in this country.

These papers can usefully be linked with Ford's contribution entitled "An ecological basis for predicting the growth and stability of plantation forests". In this well researched paper, I found the discussion of the deficiencies of the yield table approach to growth prediction and the difficulties of developing an ecologically based system most interesting. His review of the ecology of windthrow merits careful study.

For me, the outstanding contribution to the proceedings was that of David Perry from Oregon under the title "Variation between and within species". He presents an interesting and wide ranging discussion. He puts two questions to the reader concerning the manipulation of gene pools, namely: How much can we change? and How much should we change? His discussion on how forest yield may be improved through genetic selection at both organism and community level I found quite stimulating. His arguments supporting mixed forests give food for thought to both the tree breeder and silviculturalist alike. The latter, however, may be put off by excessive use of jargon which devalues the paper for those outside the field.

Several other papers provide useful reviews of their subjects and almost all are well referenced. For most people there is something useful in this book. The problem for many will be how to find it.

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