

Book Reviews

COMPUTERS IN FORESTRY

Edited by W. L. Mason and R. Muetzelfeldt. Proceedings of a Conference (on the Application of computers to the Management and Administration of Forests, the Harvesting and Marketing of Timber and to Forestry Research) Heriot-Watt University, Edinburgh, UK 11-14 December 1984. Published for the Institute of Chartered Foresters by Redwood Burn Ltd., Price £15 sterling.

This book consists of some twenty-three papers by computer users and is divided into six general sections covering the following — (1) introduction of computers to a company; (2) computers in forest planning; (3) developments in forest planning; (4) computers in mapping and harvesting; (5) computers in the wood processing industry and lastly (6) developments in Research and Management.

The papers are short, well written and edited with a general audience in mind. The emphasis throughout is what the computer can do to facilitate the user and there is a refreshing absence of detailed jargon. This makes for a very readable and informative book.

Unlike many books on computers, this one starts at the beginning i.e. introducing computers to a company. Good sound and practical advice is given by people who have obviously been through this trauma on more than one occasion. The current users of computers in the various fields of forestry is then covered in the next four sections. Applications in general forest management concentrate on planning both at forest and higher levels. Details of the British Forestry Commission's forest district computer system is outlined, as well as SKOG PLAN — 84 a planning system for forest enterprises from Skogsarbeten, Sweden. The section on computer-aided developments in forest planning concentrates on the design, use and application of databases in forestry. Also in this section are details of the use of computers in stand growth modelling and economic modelling. The latter reflect particularly well the "down to earth" attitude which prevades the majority of the papers e.g. "Economic models do not provide a panacea for all types of decision making but they can often be a useful tool for examining the implications of different decisions prior to a decision being made". Computer applications in mapping and harvesting cover data capture using hand held portable computers in the field, evaluation of various harvesting systems using simulation techniques, topographic modelling and the development of a data base to assist in regional land use planning and forest inventory. The section on computers in the processing industries outlines the use of computers in sawmills to increase volume recovery and to control more efficiently some of the ancillary processes e.g. drying of timber. This section also contains a very interesting paper outlining the use made of the British Telecom "Prestel" information service for marketing of timber and relaying of information on forestry. The final section dealing with future developments of computers in research and Management gives us a glimpse of what is yet to come in the form of "expert systems" and "intelligent knowledge — based systems" or in other words computers that have an in-built intelligence. These computers will, we are told, behave as intelligent assistants, informing, advising and explaining.

Although forestry is by its nature a conservative profession and slow to change, with many foresters viewing computers with a fair degree of scepticism, the fact remains that computers have arrived in forestry. The challenge for forestry is to recognise the benefits and limitations of computers and to use them accordingly. That computers have potential for wide application in forestry, there is no doubt.

This book gives the reader an insight into the practical applications of computers and a glimpse of what is to come.

In summary this book is a very worthwhile read for all engaged in forestry and gives us some hope at least that the future will be made that bit easier through the use of computers.

H. Phillips.