



The Purpose of Forests

The Purpose of Forests, by Jack Westoby (foreword by A.J. Leslie). Basil Blackwell Ltd, Oxford, UK, 1987. 343 pages. Price £35 sterling.

I picked up this book with its appealing title "The Purpose of Forests" for some light holiday reading. I soon became immersed in a fascinating search for some fundamental truths about international development and the responsibilities of professional advisers.

Forests and foresters are key characters, of course, but in many respects the message of the book applies to other disciplines and professional groups.

I am not a forester (Westoby claims the same distinction), but I found this to be a most interesting book about forestry and foresters, especially with reference to current concern about destruction of tropical forests.

The book is a collection of papers written over a 25-year period, so it is rather disjointed and some of it is dated, but part of the interest is the development of ideas over that period, as pointed out by Alf Leslie in the foreword.

The full title is "The Purpose of Forests; Follies of Development", but the sub-title is not displayed prominently. The purpose of forests is not discussed directly, but a recurring phrase is "forestry is not about trees, but about how trees can serve people".

Westoby has expended a lot of energy promoting this concept over many years.

In many respects this book describes a sad story. Westoby and others at FAO worked hard to bring forestry into respectability in the eyes of governments and development funding agencies, with the purpose of stimulating forest management, hence benefitting "common people" in developing countries.

Unfortunately these efforts largely backfired. The forests received attention as intended, but the most common result was irresponsible exploitation of tropical forests on a global scale, leading to greater than ever disparities between rich and poor, both within countries and between countries.

The more recent papers attempt to analyse what went wrong, and what should happen in the future.

BOOK REVIEWS

The message I got was that the international funding agencies, national governments, and foresters, all lost sight of (or never realised) that the purpose of forests is to serve the needs of common people.

Solutions are not easy, but in a 1977 address to the Royal Society of New Zealand (which I heard in Christchurch) Westoby gives three priorities for achieving agriculture-supportive forestry rather than export-oriented extraction in developing countries:

- 1) Recognising that forests are for people, forest policy must be developed in close co-operation with agricultural policy, the primary objective being to allow developing countries to produce and cook their own food.
- 2) If sufficient forest resources are available, then forest-based industries can be developed in order to meet domestic needs.
- 3) If there are abundant resources, and if the above priorities are met, only then should export of forest products be contemplated, maximising processing to meet local needs.

Westoby concludes his latest address (1985) with the opinion that "foresters intent on supporting development in the Third World need to know as much about peasants as they do about trees".

A number of other themes surface in the book, and this review cannot do justice to them all. Among others, Westoby discusses forestry education, reviews forestry in countries as diverse as China and New Zealand, and promotes dialogue between foresters and conservationists (the latter being some of the people that trees are for).

Running over and above this saga on the many failures and few successes of international development through forestry, comes an uncompromising message about the responsibility of professional foresters (or any other professional group). Regardless of one's employer, the overriding responsibility is to the long-term community interest. He is aware that this may often result in conflicts and difficult situations, which will require strong support to individuals from their professional societies.

I found the book awkward to read because of the jumps in years and ideas from paper to paper, but it was worth the effort because the underlying messages need wider circulation.

Andrew Buchanan

Flora of Australia

Flora of Australia volume 19. Myrtaceae – Eucalyptus, Angophora. Australian Government Publishing Service, Canberra (1988).

Because of its importance, the genus *Eucalyptus* was chosen for publication early in the *Flora of Australia* programme. Mr George Chippendale, who was until recently employed at Division of Forest Research, CSIRO, Canberra, undertook its preparation.

Although much taxonomic work on *Eucalyptus* has been published in the last 25 years, this volume is the first complete account of the genus since Blakely's "A Key to the Eucalypts" (1934, updated in 1955 and 1965). While the present work was in progress, it became clear that major changes in the classification of the eucalypts are likely in the near future. Despite this, it was decided to publish Chippendale's account since it brings together all currently accepted species and all other published specific names, and presents a formal classification at the series level. This therefore provides a baseline against which future publications can be assessed.

After describing the characters of the family and of the genera *Eucalyptus* and *Angophora*, Chippendale presents a 60-page artificial key to the species of *Eucalyptus* which, unlike Blakely's earlier key, uses characters of bark, leaves, buds and fruit which are generally available in the field. Identification of many eucalypt species can never be easy, but this key is a genuine attempt to make it as easy as possible. It is followed by detailed but concise descriptions of all series and species published to January 1987. These are arranged to show natural relationships. Superb drawings illustrate the salient characters of each species.

These descriptions make up the main text, and are followed by distribution maps arranged in the same sequence.

This important book will be a necessary reference for all those interested in the botany and taxonomy of the euca-

lypts, and serves to illustrate the very high standard of forest research in Australia.

This publication is available by mail order from:

AGPS Mail Order Sales
GPO Box 84
Canberra
ACT 2601

AUSTRALIA

and costs \$A44.95 in paperback (cat.no.880515 5 RRP) or \$A59.95 in hardcover (cat.no.870157 2 RRP).

J.D. Allen

Safety Manual on Silviculture

Comprehensive safety on tree planting and silviculture, from agricultural chemicals to ultra-high pruning, is contained in a new booklet released by Occupational Safety and Health – a service of the Department of Labour.

The department's senior bush safety adviser, Leon McIsaac, said the booklet is a pocket-size manual for forest workers that will also be invaluable to farmers, parks and reserves staff and anyone who works in a small wood-lot or forest.

He said many people in the forest industry are seasonal workers and are not aware of hazards such as chemical sprays.

"It's a very strenuous type of work and injuries can easily occur if safe practices are not followed."

He said the code is a complete manual covering things such as the use of chainsaws and hand tools; rules for safe tree felling, pruning and thinning; fires and burnoffs; tractor and helicopter operations; and road construction and bridges.

It also covers the legal obligations of employers and people who let contracts for silvicultural work.

"It's also a good guideline for farmers, for example, who are going to let a contract and are not sure of their obligations and liabilities. They can specify in the contract that all sections of the code must be complied with."

Mr McIsaac said the booklet will be a basic text for forest workers and sets out safe work methods that meet the requirements of the Bush Workers Act. It will also be useful for forest workers who are sitting the certificate in forest skills issued by the Logging and Forest Industry Training Board.

Copies of the Safety Code for Forest Establishment and Silviculture are available from area offices of Occupational Safety and Health.

In our Contemporaries

Forest Industries

LOADRITE TWO YEARS ON

Ellis, J. Vol. 17(9): 36-39 (1986).

After three years' operation the Loadrite has proved to be a reliable and useful tool for weighing forest outturn. Operated in the recommended fashion, it provided estimates of forest outturn which are more accurate than hand measurement and in close agreement with a weighbridge.

Appita

CHEMIMECHANICAL AND THERMOMECHANICAL PULPS OF RADIATA PINE COREWOOD AND SLABWOOD. PT3. FACTORS DETERMINING PAPER QUALITY

Kibblewhite, R.P., Corson, S.R.,
Graham, K.L. (1987) Vol. 40(2): 121-131.

Factors are examined which determine the qualities of papers made from radiata pine corewood and slabwood chemimechanical pulps (CMP) of yield about 90%, and thermomechanical pulps (TMP) of yield about 98%. Major factors which determined CMP and TMP paper qualities were (a) fibre surface compositions, (b) the morphology and/or surface chemistry of the -200 fines and of the coarse fines-type material in the -50/+200 pulp fraction, and (c) probably fibre collapse behaviours.

New Zealand Journal of Botany

ECOLOGY OF *NOTHOFAGUS* *MENZIESII* IN THE CATLINS ECOLOGICAL REGION, SOUTH-EAST OTAGO (I) SEED PRODUCTION, VIABILITY, AND DISPERSAL

Allen, R.B., Vol. 25: 5-10 (1987).

Production, viability, and dispersal of

Nothofagus menziesii seed in the Catlins Ecological Region were measured and found to be similar to records from elsewhere in New Zealand. Seed production was greater at a low (150m) than a high (450m) altitude site, but seed soundness was higher at the latter. Sound seed had a germination rate of 80-95%, dropping to 50% after two years' storage. Seed was dispersed at least 250m from the nearest parent plant at both sites, and dispersal was more effective downslope than upslope. The distribution of isolated stands of *N. menziesii* in the Catlins Ecological Region suggests that seed can be dispersed, probably by wind, up to 6km from the parent plant.

ECOLOGY OF *NOTHOFAGUS* *MENZIESII* IN THE CATLINS ECOLOGICAL REGION, SOUTH-EAST OTAGO (II) SEEDLING ESTABLISHMENT

Allen, R.B., Vol. 25: 11-16 (1987).

Nothofagus menziesii seedling establishment in the Catlins Ecological Region was investigated with respect to microsite preference and the physical characteristics and vegetation of the surrounding site. The mycorrhizal status of wild seedlings was recorded. The germination and establishment was recorded. The germination and establishment of *N. menziesii* in different forest soils, which were sterilised and provided with mycorrhizal inoculum, were investigated. Site physical characteristics, and density and cover of woody plants, had little effect on *N. menziesii* seedling establishment. Raised, bryophyte-covered microsites provide optimum moisture and light conditions for *N. menziesii* establishment in the wild. *Nothofagus* seedlings can form effective mycorrhizal associations within both *Nothofagus* and other forest types in the Catlins. Under experimental conditions, seedling growth was best on relatively fertile podocarp forest soil, intermediate on *Nothofagus* forest soil, and poor on *Weinmannia-Metrosideros* forest soil. Performance on the last soil was due at least in part to the failure of seedlings to form mycorrhizal associations, despite provision of mycorrhizal inoculum and success in mycorrhizal establishment under similar conditions in the other two soils.