

socio-economic effects. A penultimate chapter has a miscellaneous collection of issues including effects of forests on temperature, wind and noise, filtering of air, the harbouring of weeds and pests, and fire.

Each of the main chapters follows the same format, commencing with a summary in the form of a few leading questions and synoptic answers. Although the author seems at pains to have predicted all the questions likely to be asked, the style is attractive and tends to invite the reader to read on. In each chapter, the questions are used as headings for sections in which there is more detailed appraisal. There is a reference list at the end of each chapter; disappointingly, most seem to be from New Zealand journals and magazines.

The final chapter, like the first, is also a personal view where the main theme seems to be an adamant claim that most negative effects of forestry on pasture are trivial (if they occur in small amounts).

Two appendices are included; one on The New Zealand Forest Accord and one on the Principles for Commercial Plantation Forest Management in New Zealand. There is a useful and comprehensive index.

The text comes across as being written by a person with considerable knowledge and expertise in many areas of forestry and forest management. Many readers will surely find much valuable information in this bulletin, some of it in an easily understandable quantitative form. As well as identifying many environmental effects, there are appraisals of the extent of the impact and often comments about mitigation. On occasions there are hints about needs for more research.

This is a persuasive publication. Although it is up-to-date and seemingly comprehensive, I think that the author may have been a little selective in his information and on occasions was tempted to talk about some items from the literature out of their original context.

The text is illustrated colourfully throughout and I long to know what the rationale was for including such a lavish selection of illustrations. I sensed that the publishers had sought the advice of an advertising person. Most illustrations seemed only to serve pictorial objectives and were not required to illustrate the main points. In some instances the illustrations and their captions were hardly scientific because they hinted of proved causal relationships. A picture of a lovely serene evening on a beach in the chapter describing the 'greenhouse effect' has the caption: "Sea level rises of 0.2-1.0 m are predicted by the end of the 21st century. This may not seem substantial but many small island states feel that their very existence is threatened within three generations."

Some captions were so odd as to be almost a joke. For example, in the chapter on socio-economic effects a picture of two men (and a dog) standing by a line of young pines has the caption: "Much of the opposition to forestry may be due to the unwillingness of current landowners to see 'share-a-drink neighbours replaced by lawyers' letters from an alien culture."

In the text there is a strong argument that forests are grown for timber (and other wood products) and absolutely nothing else. The concept of multi-use forestry is rejected outright, partly on the grounds that other forest uses are catered for by the forests in the conservation estate. True, the practice of multi-use forestry takes place in countries where population densities are far greater and where the pressures on the environment are higher and more diverse. Replacing one monoculture with another (which is structurally more diverse) is, generally speaking, hardly an issue for conservation. Nevertheless, I find it worrying that in this bulletin there is little sympathy for forest management practices which could benefit both the forest and wildlife. For example, roadside verges between road and plantation are not considered as possible linear habitats for native species; rather the text deals with aspects of road safety only.

By the time I had finished reading the introductory pages, it was clear to me that this publication was intended to advocate that afforestation of New Zealand pasture by pine trees was good and was to be encouraged. The text seems to make no apologies that this publication is intended to foster and promote (sell the idea) conversion of pasture to pine trees (note pine trees and not other conifers, let alone any other trees).

There is a lot of bias towards the positive benefits and much is said about minimal disadvantages of conversion of pasture to pine trees. As the author says, "this bulletin can not be claimed to be an independent assessment of the topic" but nevertheless "a scientist's duty is to consider issues objectively". Perhaps this approach could be because of the affiliation of the author, and one has to ask why was this publication not written by an 'independent group'?

I believe that this text does provide an excellent basis for discussion. It provides brief insights into most of the issues, it is informative (in a biased way) and it is easy reading. I would recommend it as a discussion document for those managing the land as well as for foresters, biologists, resource managers and students. However, I would ask readers not to believe everything they read.

Noting on the front page, the quote from Virgil (37 B.C.), I would like finally to suggest that we should consider that future generations may say that although trees do not delight all persons, there are more to trees than radiata pine trees and there are more to forests than timber production. New Zealand is indeed unique (in many ways), and sadly part of that uniqueness has to do with devastated indigenous plant communities and damage caused by alien species. It seems a pity that some people in New Zealand believe that conservation of our indigenous species should be confined to the so-called conservation estate. The Forest Research Institute could do well to be more open to wider discussion among a wider group of people.

**Dr Ian F. Spellerberg, Head
Department of Resource
Management**

A Catalogue of the Eucalypts

A catalogue of eucalypts, comprising the genera *Angophora*, *Corymbia*, and *Eucalyptus* of the family *Myrtaceae*, has been compiled by M.D. Wilcox, a forestry consultant with Groome Pöyry Ltd, as a ready reference to the correct names of all 789 known species to the end of 1996. A list of references on eucalypt taxonomy, classification and distribution and an alphabetical index of species are also provided in the 114 page book.

The inspiration and need for this work has been the explosion of newly-discovered and named eucalypts in the past 15 years through the endeavours of an energetic band of eucalypt botanists in Australia, says the author in the foreword.

In addition to the present 789 recognised species of eucalypt, there are a further 123

subspecies or varieties, giving a total of 912 eucalypt taxa. Only five species occur exclusively outside Australia.

Eucalypts, the book says, are extraordinarily useful and versatile trees for afforestation, with an estimated 10 million hectares of plantations worldwide, and with numerous mills producing wood chips, pulp, paper, rayon, fibreboard, and solid wood products.

Of the 789 species listed in the catalogue only a few, such as *Eucalyptus globulus*, *E. grandis* and *E. camaldulensis*, have been regularly planted on a wide scale.

The book may be ordered from Groome Pöyry Ltd, Forest and Forest Industry Consultants, PO Box 73-141, Auckland Airport. Tel (09) 256 0003 Fax (09) 256 0000.