

# The Victorian Forestry Roundtable Meeting: a discussion of transitions to sustainability in Victorian forests

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## Summary

A Forestry Roundtable Meeting was convened at Marysville in Central Victoria in August–September 2002 to explore issues associated with improvement of the management of Victoria's montane ash forests. Representatives were invited from government agencies, timber interests and conservation groups. In addition, scientists from Australian and overseas academic institutions attended. The aims of the meeting were to: (a) provide a forum for stakeholders to engage in constructive dialogue about approaches to forest management, water production, and biodiversity conservation in the Central Highlands of Victoria, and (b) highlight to stakeholders that resource management issues faced in the Central Highlands of Victoria have been faced in forests elsewhere in the world and by other resource sectors in Australia. Many valuable insights emerged from the Forestry Roundtable Meeting. Three major issues emerged from the meeting and are discussed in this paper.

(1) There was considerable stakeholder dissatisfaction with the Regional Forest Agreement process — both from industry and from conservation perspectives. There was concern about over-commitment of resources, with the predicted timber yields exceeding actual yields from montane ash forests. It was argued that a more transparent participatory (rather than consultative) process was needed in which all stakeholders (including government agencies) had access to the same (primary) data and analytical procedures. Many participants believed this would engender greater trust in, and public ownership of, the Regional Forest Agreement process.

(2) The reduced technical capacity of resource management agencies was raised as a major concern. Such a capacity is fundamental to improving forest management. This problem is not restricted to Victorian or Australian forests. For example, the extremely poor record on forest monitoring (such as biodiversity responses to logging disturbance) has been recognised as a problem worldwide and is considered likely to be a limiting factor in discussions on how to improve forest management practices in the future.

(3) The widespread use of clearfelling to harvest and regenerate montane ash forests was considered to be a major issue. Developing and applying harvest practices that are more ecologically sensitive in at least some areas of logged forest was considered critical to resolving some of the conflict between timber and other values. Guidelines for developing such methods are available elsewhere in Australia (e.g. Tasmania) and around the world (e.g. North America and Scandinavia). A concrete outcome of the Forestry Roundtable Meeting was a broadly-based commitment to begin experimenting with new silvicultural systems that retain more vegetation on logged coupes and to determine the value of such approaches for biodiversity conservation.

*Keywords:* forest policy; forest management; multiple use; forest products; watersheds; conservation; sustainability; Victoria

## Introduction

The management of native forests is one of the most socially divisive issues in Australia. It has been a major source of conflict among and between rural timber communities, government agencies and conservationists (Dargarvel 1995). In Victoria, the protection and management of the State's montane ash forests,

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particularly the significant areas of mountain ash (*Eucalyptus regnans*) and alpine ash (*E. delegatensis*) to the north-east of Melbourne in the Central Highlands of Victoria continues to be of concern (Mackey *et al.* 2002). These areas have many important values that can be negatively or positively influenced by management regimes (Lindenmayer 1996). There appear to be three key issues:

- (1) Ash-type eucalypt forests dominate the catchments that produce most of the water for the city of Melbourne. While management for conservation and water production values appear to be compatible in the closed water catchments central to Melbourne's water supply, inappropriate timber harvesting within other water catchments can have negative impacts on the quality and quantity of water (O'Shaughnessy and Jayasuriya 1991).
- (2) Ash-type eucalypt forests are some of the most valuable timber production forests in eastern Australia (Macfarlane and Seebeck 1991) and regional industries and local communities presently demand access to this resource (Gooday *et al.* 1997).
- (3) Ash-type eucalypt forests are significant landscapes for biodiversity conservation. For example, they support virtually the entire known distribution of the rare and declining Leadbeater's possum (Lindenmayer 2000). In addition, areas of old-growth ash forests such as those within the closed water catchments of the Yarra Ranges National Park are critical habitats for taxa like the sooty owl (*Tyto tenebrecosa*) and the yellow-bellied glider (*Petaurus australis*) (Milledge *et al.* 1991; Lindenmayer *et al.* 1999a).

Integrated management of montane ash forests to maintain key biodiversity, water and timber values is a challenging question that must be addressed at a range of scales including the whole landscape (Lindenmayer and Franklin 2002). The Regional Forest Agreement (RFA) for the Central Highlands Region (Commonwealth of Australia and Department of Natural Resources and Environment 1997) was an attempt to do this, but left some significant issues unresolved. Indeed, despite its magnitude, the RFA process should not have been expected to permanently 'solve' forest policy and management issues, characterised as they are by uncertainty, contested values and external variables (Mobbs 2003). In the Central Highlands of Victoria, additional remaining issues include the adoption of silvicultural alternatives to existing forms of clearfelling that have greater congruence with natural disturbance regimes and might have reduced impacts on key elements of the biota (Lindenmayer and McCarthy 2002).

A Forestry Roundtable Meeting was convened at Marysville in Central Victoria in August/September 2002 in an effort to further explore issues associated with the improvement of the management of Victoria's montane ash forests. Representatives were invited from government agencies, timber interests and conservation groups. In addition, scientists from a range of Australian and overseas academic institutions attended. The Forestry Roundtable Meeting had three broad aims:

- to inform stakeholders in the forests of the Central Highlands of Victoria of the array of conservation, water and timber values in the region and, in turn, create the appropriate platform for assessing State Government policy as well as on-ground forest management regimes;

- to provide a forum for stakeholders to engage in constructive dialogue about approaches to forest management, water production and biodiversity conservation in the Central Highlands of Victoria;
- to highlight to stakeholders that resource management issues faced in the Central Highlands of Victoria have been faced in forests elsewhere in the world and other resource sectors in Australia — and there can be some useful lessons from other experiences.

This paper briefly outlines the approach taken for the Forestry Roundtable meeting, some of the outcomes, and some of the potential implications for future management practices in Victorian montane ash forests.

### The structure of the Forestry Roundtable Meeting

The model for the Forestry Roundtable Meeting was based on those used elsewhere in wide-ranging discussion forums on environmental and management issues in the water industry (i.e. irrigation water and environmental flows in the Snowy River system, etc.) and the cotton industry. Invited participants at the Forestry Roundtable Meeting were limited to 35 to allow for reasonable discussions. The invited participants included stakeholders with a diverse range of interests; that is, representatives from the Victorian Government (Parks Victoria, Department of Natural Resources and Environment, and Melbourne Water), conservation groups (the Australian Conservation Foundation and the Forest Summit), timber communities (Timber Communities Australia), and the timber industry. Other invited participants were experts in catchment hydrology, forest ecology, biodiversity conservation, policy analysis, resource economics and environmental law. They were from a range of jurisdictions including Australia, Canada, Finland, New Zealand, Sweden, and USA. Many have participated in major (and often rapid) changes in forest management practices in their respective countries or Australian States. Representatives of the two private foundations (The Myer Foundation and Poola Foundation) that provided financial support for the Forestry Roundtable Meeting also participated.

The first day of the Forestry Roundtable Meeting was a field tour of the montane ash forests, organised by the Victorian Department of Sustainability and Environment. Old-growth and logged and regenerated forests were visited and presentations were made by government officials about various forest management, conservation and water management issues. The second day of the Forestry Roundtable Meeting was spent in a series of formal presentations followed by open discussions of the issues raised by each speaker. An extended 'break-out' session was used by smaller groups of participants to explore key ideas on ways to improve forest management. Media were excluded to ensure that discussions were as wide-ranging, frank and free as possible. The Chatham House Rule applied for the discussions (see [www.riia.org](http://www.riia.org)) and a professional facilitator helped to ensure that the meeting ran smoothly. Following formal discussions at the Forestry Roundtable Meeting, a subset of participants further examined issues associated with the management in the montane ash forests over an additional two days. Much of the material contained in this paper is based on those extended discussions, although the views

expressed here are those of the authors and not of the larger group of participants at the formal Forestry Roundtable Meeting.

### Some of the outcomes of the Forestry Roundtable Meeting

Many valuable insights emerged from the Forestry Roundtable Meeting. It is not possible to summarise all of them, and a subset of three considered to be important and interesting are presented below. A detailed set of notes based on the discussions at the Forestry Roundtable Meeting was circulated to all invited participants following the meeting, and is available on request from the senior author. In addition, a number of international participants at the meeting contributed articles for a recently published book on sustainable forest management (Lindenmayer and Franklin 2003) which explores in more detail many of the issues faced in Victoria from an international perspective.

#### New silvicultural systems in montane ash forests

The widespread use of clearfelling to harvest and regenerate montane ash forests is a major issue. Clearfelling is used in more than 95% of logged areas of mountain ash and more than 98% of logged areas of alpine ash (Lutze *et al.* 1999). Clearfelling has the potential for detrimental impacts on many elements of the biota (Lindenmayer 1996) and ecosystem functions, including effects on water quality and yields (O'Shaughnessy and Jayasuriya 1991). Developing and applying harvest practices that are more ecologically sensitive in at least some areas of logged forest are critical to resolving some of the conflict between timber and other values. Some guidelines for developing such methods might be found elsewhere in Australia and around the world. Within wet forests in North America and Scandinavia, major changes in timber harvesting practices have been made within the last 5–10 y (Angelstam 1997; Dunsworth and Beese 2000). In these countries, clearfelling is being replaced by other harvesting methods. For example, the Variable Retention Harvest System (VRHS) has superseded clearfelling in parts of Washington State and Oregon in north-western USA (Franklin *et al.* 1997). Similarly, major timber companies have embraced more environmentally-sensitive alternatives to clearcutting; an example is Weyerhaeuser Limited, which has extensive holdings in British Columbia and Alberta, Canada, and still maintains significant timber and pulp industries (Dunsworth and Beese 2000; Mitchell and Beese 2002). Sweden has made a nationwide transition away from clearfelling in the past ten years (Angelstam 1997; Fries *et al.* 1997).

In Tasmania, experiments are underway in harvesting wet forests, such as those dominated by mountain ash, alpine ash and messmate (*Eucalyptus obliqua*), using alternatives to clearfelling (such as the 'fairways' approach where strips of forest are retained between narrow harvested 'alleys' (Hickey *et al.* 2001)). In the case of the montane ash forests of the Central Highlands of Victoria, the 'Understorey Island' concept of retained vegetation on logged sites was developed by the Victorian Department of Natural Resources and Environment (Ough and Murphy 1998). With harvesting modifications to include the maintenance of overstorey eucalypts, this could provide the types of habitat conditions critical for animals such as Leadbeater's possum and many other species — thereby reducing logging impacts on many elements of the biota.

We are *not* proposing the replacement of one cutting method (clearfelling) by another single prescriptive approach in montane ash forests. Rather, silvicultural prescriptions should be customised to forest and landscape conditions and management objectives (Florence 1996; Franklin *et al.* 1997), including worker safety (Squire 1987). This flexibility of silvicultural prescriptions is consistent with the notion that it may not be necessary (or even possible) to maintain all elements of the biota on all hectares of harvested land (Bunnell *et al.* 1999). Indeed, knowledge of natural disturbance regimes can be used to guide design of silvicultural prescriptions as well as to appropriately place them on the landscape (e.g. Rülcker *et al.* 1994). For example, retention of more complex structure in residual vegetation, to meet biodiversity objectives in Victorian ash-type eucalypt forests, may be appropriate on areas where natural disturbance regimes (fire, in this case) have tended to produce multi-aged stands of trees exhibiting high levels of structural complexity. These sites are generally on flat terrain and lower south-facing slopes which have horizontal shading and receive little solar radiation (Lindenmayer *et al.* 1999b).

A concrete outcome of the Forestry Roundtable Meeting was a broadly-based commitment to begin experimenting with new silvicultural systems that retain more vegetation on logged coupes to determine their value for biodiversity conservation. Since the meeting, a series of discussions have been held with field operations staff from the Victorian Department of Sustainability and Environment and a rigorously-designed cutting experiment started in December 2002.

#### Data-sharing arrangements with all key stakeholder groups

Although a Regional Forest Agreement was signed for the Central Highlands region (Commonwealth of Australia and Department of Natural Resources and Environment 1997), discussions at the Forestry Roundtable Meeting indicated considerable dissatisfaction with the process — both from industry and from conservation perspectives. There was concern about over-commitment of resources, with actual timber yields well below predicted yields from montane ash forests. It was argued that a more transparent participatory (rather than consultative) process was needed in which all stakeholders (including government agencies) had access to the same (primary) data and analytical procedures. Many participants believed this would engender greater trust in, and public ownership of, the Regional Forest Agreement process.

While such a participatory process would be a useful one, several observers recognised that in places like Australia, North America and Northern Europe, four key ingredients ensured sustained conflict over forest management:

- (1) an educated public,
- (2) an affluent public,
- (3) a scarce resource worth fighting about — such as old forest on high productivity sites (humans tend to value such scarce objects highly), and
- (4) the fact that forest trees are long-lived plants — a trait that does not fit well with the short-term perspectives of politicians, capitalistic markets and economics, short-term managerialism, or the immediacy of the human aesthetic sense and time perspectives.

Given such ingredients, it seems likely that conflict over the management of Australian native forests will continue. However, political processes such as state and national elections can rapidly change the situation in terms of forest management, with little reference to ecological considerations, as happened in New Zealand (James and Norton 2002).

### Loss of intellectual capacity within resource management agencies

The reduced technical capacity of resource management agencies was identified as a serious issue. Such a capacity is fundamental to improving forest management. For example, it was argued that little of the knowledge generated by major research efforts such as the Silvicultural Systems Project in Victorian forests (Campbell 1997) had been used by managers. This problem is not restricted to Victorian or Australian forests. For example, the extremely poor record on forest monitoring (such as biodiversity responses to logging disturbance) is recognised as a problem worldwide and is considered likely to be a limiting factor in discussions on how to improve forest management practices in the future. Indeed, we believe it is critical to develop mechanisms to ensure that monitoring is adequate to the task, rigorous in execution, and assured of long-term implementation to ensure sustainable resource management and the fulfilment of obligations, such as those under forest certification agreements (e.g. the Montreal Criteria; Montreal Process Implementation Group 1998). Without monitoring and research and subsequent operational actions where needed, forestry organisations cannot claim to have embraced adaptive management (*sensu* Holling 1978) in which forestry practices are continuously improved on the basis of new knowledge (Lindenmayer and Franklin 2002).

### Concluding remarks

Creating a consensus from a group of individuals who have strong interests and represent very different (often diametrically opposed) constituencies is difficult. The Forestry Roundtable Meeting was *not* designed to resolve the entire array of conflicts associated with native forest management in the Central Highlands of Victoria. This is not possible, particularly given the complexity, uncertainty and history of conflict that characterises these issues. Nevertheless, the exchange of ideas at the meeting resulted in all of the participants being better informed of current issues in a local, national and international context. Perhaps most importantly, the on-ground implementation of a new scientifically-credible and research-based cutting experiment on alternative cutting methods and the biodiversity response is a concrete outcome of the workshop, and a valuable step forward in the process of developing ecologically sustainable forest management practices.

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