

Guest editorial

The House of Representatives Inquiry and the future of forestry

Last November, the House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry tabled their report, *Seeing the Forest Through the Trees*¹, that inquired into the future of the Australian forestry industry. This easy-to-read slender paperback (132 pages plus appendices, distilled from 121 submissions, 23 exhibits and 91 oral submissions) deals elegantly with several important forestry issues, some of which were previously articulated by Ross Florence² in this journal. Amongst 19 recommendations, the report seeks a formal assessment of demand and supply scenarios (Rec. 1), actions to promote better understanding of carbon embodied in wood (Recs 3 and 4), renewal of the Regional Forest Agreements (Recs 6–8), and an evaluation of forest stewardship (Rec. 9) and plantation management incentives (Recs 10–11). The report concludes by calling on the Australian Government to lead discussion on three topics: on forests and climate change, on farm forestry and on future supply and demand scenarios (Rec. 19). On the whole, the report is optimistic about opportunities, particularly about the integration of forestry with other land uses (Section 8.5). It also draws attention, however, to several potential problems, including the need to strengthen research and development (Section 8.21), a view backed up recently by FWPA³. Notwithstanding the obvious enthusiasm of the committee chair Dick Adams, the ultimate impact of the report remains uncertain, and precedents suggest that the impact may be modest unless foresters, individually and collectively, help to advance these issues.

Experience reveals a tendency for bureaucratic and political handling of such matters to be cumbersome and ineffective, as too often those involved have favoured political expediency over durable policy, sought consensus rather than embracing diversity⁴, prescribed regulations rather than incentives⁵, and succumbed to piecemeal bandaids rather than enduring solutions. Two great challenges are to advance the Standing Committee's recommendations towards better policy, and to avoid the piecemeal approach that is too often taken as the easy interim settlement. Examples of such inertia and 'bandaid politics' include the Regional Forest Agreement (RFA) process that at times degenerated into an unscientific scramble to change land tenure^{6,7},

and the NSW Native Vegetation Regulations which entrench rigid regulations rather than empower innovation^{2,8}. These examples both failed to realise their potential because they lacked the innovation often extolled, for instance by commentators such as Rod Keenan⁹ and Jim Douglas¹⁰ in recent *Australian Forestry* editorials, instead resorting to 'command and control' despite well-documented limitations of the latter approach¹¹.

Forests are diverse, so it should be no surprise to readers that practices that are ideal in one situation may not suffice in all cases, and thus that prescriptions have limitations and should be seen as a last resort and not as the premier tool for natural resource management. Far better to foster innovative outcomes through incentives (as I have discussed elsewhere¹²), and to mitigate risks by offering those with limited experience the option of seeking advice, implementing adaptive management¹³ or following other guidance. The prevalence of regulations regarding tree hollows, without corresponding attention to other fauna requirements such as sufficient food and low predation, reflects a piecemeal approach rather than a holistic solution. This piecemeal view is further illustrated in the RFA emphasis on changing land tenure to national park, reflecting simplistic assumptions about conservation.

The conservation debate in Australia in recent times has largely been about tenure^{2,14}, with many people assuming that simply designating an area as national park is sufficient to ensure good conservation outcomes. This naïve view is compounded by the commonly-held belief that conservation and production are mutually exclusive: that tenuring forest within national park is the only valid form of conservation and that all forest outside national park is used for production and has little conservation value. This view is ignorant of the reality, and of alternative conservation approaches such as the UNESCO Biosphere Reserve model¹⁵ that avoids many of the conflicts that may arise when national park abuts agricultural

¹ <http://www.aph.gov.au/house/committee/arff/forestry/report.htm>

² Florence, R. (2005) Social responsibility for New South Wales forests. *Australian Forestry* **68**, 1–2.

³ Sinclair, R. (2012) Cause or effect: what lies behind declining funds for forestry R&D. *ForWood* <http://www.aph.gov.au/house/committee/arff/forestry/report.htm>

⁴ Arabena, K. (2011) Forests as landscapes for reconciliation. *Australian Forestry* **74**, 1–3.

⁵ Vanclay, J. (2007) A new approach to farm forests based on incentives rather than punitive regulation. *Australian Forest Grower* **29**(4), 28–32.

⁶ Horwitz, P. and Calver, M. 1998. Credible science? Evaluating the Regional Forest Agreement process in Western Australia. *Australian Journal of Environmental Management* **5**, 213–225.

⁷ McAlpine, C.A., Spies, T.A., Norman, P. and Peterson, A. (2007) Conserving forest biodiversity across multiple land ownerships: lessons

from the Northwest Forest Plan and the Southeast Queensland Regional Forests Agreement (Australia). *Biological Conservation* **134**, 580–592.

⁸ Nichols, J.D. (2007) Evolution and development of a code for private native forestry in New South Wales, Australia. *Small-Scale Forestry* **6**, 127–140.

⁹ Keenan, R. (2010) Education, research and innovation: transforming forest management in the 21st century. *Australian Forestry* **73**, 1–2.

¹⁰ Douglas, J. (2011) Reflections of an expatriate forester. *Australian Forestry* **74**, 79–80.

¹¹ Holling, C. and Meffe, G.K. (1996) Command and control and the pathology of natural resource management. *Conservation Biology* **10**, 328–337.

¹² Vanclay, J.K. (2007) How to foster good husbandry of private native forests. *Small-Scale Forestry* **6**, 205–218.

¹³ Gunderson, L. (1999) Resilience, flexibility and adaptive management—antidotes for spurious certitude? *Conservation Ecology* **3**, 7.

¹⁴ Underwood, R. (2007) The turn of the forestry wheel. *Australian Forestry* **70**, 1–2.

¹⁵ Schultz, L., Duit, A. and Folke, C. (2011) Participation, adaptive co-management, and management performance in the World Network of Biosphere Reserves. *World Development* **39**, 662–671.

production or urban infrastructure. The reality is that resource and other constraints mean that in many cases national park tenure means ‘fence and forget’ and leaves forest vulnerable to weeds¹⁶, feral animals¹⁷ and wildfire¹⁸. The reality is that most organisms depend on habitat, not on tenure, and that failure to manage (including both neglect and mismanagement) leads to habitat change that may be detrimental to target fauna and flora¹⁹.

Fire is a provocative example of the need for careful and considered management of protected areas. It is challenging to devise fuel reduction and fire suppression regimes compatible with conservation objectives^{20,21}. These difficulties are compounded in a modern landscape where the conservation estate may comprise fragmented islands in a sea of development. And the ability of land managers to implement the desired burning and suppression plans may be compromised when there is no production function to sustain a skilled workforce with local on-ground knowledge, nor locally available fire suppression equipment needed for early intervention. A reductionist view focuses narrowly on the momentary benefit of a tenure change, such as preventing the disturbance associated with a timber harvest. Such a narrow view will likely indicate a different optimal management regime than a more comprehensive view that accounts for long-term and landscape-wide ecological, economic and social considerations. A mature discussion of conservation options requires that foresters and other conservation professionals assist the broader community to understand this holistic view of forests and their role in society^{22,23}.

Climate change and the imperative to reduce greenhouse gas emissions add further complexity and redouble the need for a fresh view of environmental management. Several dangers are implicit in the seductive allure of carbon farming and related biosequestration incentives. Carbon farming may foster complacency and neglect of the real need to reduce fossil emissions which contribute the bulk of the CO₂ excess²⁴. Another danger is that the capacity for

biosequestration is often over-stated: for example, biochar is often touted as a greenhouse solution, but in reality offers little potential²⁵. Yet a third danger lies in future liabilities: many providers of biosequestration and other environmental services receive an up-front payment on the promise of future benefits, (hopefully) delivered far into the future. Recent experience with the failure of MIS plantings²⁶ has demonstrated some of the risks with such an approach. Far better to offer an annuity based on evidence of carbon currently stored than to promulgate up-front payments for uncertain pledges. Such annuities for carbon and other environmental services can easily be implemented as stewardship payments, as I have suggested elsewhere²⁷. And far better to manufacture biofuels from biomass residues than to justify reckless fossil fuel extraction with unproven offsets (such as ‘clean coal’).

One of the cruel ironies of some environmental campaigns is that their narrow focus is like ‘re-arranging the deckchairs on the Titanic’. Yes, the sinking ship analogy applies, because some do-gooders are so focussed on saving trees from the axe that they lose sight of broader implications and resort to greenhouse-forcing alternatives that may be much worse for the environment in the long run²⁸. From a whole-of-environment perspective, we may be best served by ‘free-range forestry’, in which we harvest trees in ecologically-appropriate ways from near-natural forests to provide greenhouse-friendly wood for furniture, fibre and fuel, and with which we sustain communities interested in, and knowledgeable about, their local forests. These insights from a broader perspective are not evident to all, and are not always welcomed by those with vested interests and other agendas. Unfortunately, forest management agencies have been lax in allowing the demise of much long-term forest monitoring and in neglecting the dissemination of information that could enlighten these misconceptions—a matter addressed in the Inquiry (Rec. 8).

These consequences of a holistic viewpoint will come as no surprise to foresters, but such insights are not commonly shared by many other land managers and policy-makers, and it is imperative that foresters and others with systems-based, landscape-level and long-term insights help to develop a system-wide understanding amongst other stakeholders involved in formulating forest and land-use policy. This broad view is essential, because the Australian forest industry has no future without production forests, and forests have a limited future without a better understanding of conservation and the importance of a holistic view. Only then can we be confident of *Seeing the Forest Through the Trees* and gaining the best outcome from the Inquiry’s 19 recommendations.

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¹⁶ Coleman, M.J., Sindel, B.M., van der Meulen, A.W. and Reeve, I.J. (2011) The risks associated with weed spread in Australia and implications for natural areas. *Natural Areas Journal* **31**, 368–376.

¹⁷ Bradshaw, C.J.A., Field, I.C., Bowman, D.M.J.S., Haynes, C. and Brook, B.W. (2007) Current and future threats from non-indigenous animal species in northern Australia: a spotlight on World Heritage Area Kakadu National Park. *Wildlife Research* **34**, 419–436.

¹⁸ Gill, A.M. (1979) Fire in the Australian landscape. *Landscape Planning* **6**, 343–357.

¹⁹ Vanclay, J.K. (2008) Conserving habitat calls for hands-on approach. *Australian Forest Grower* **31**(1), 28–29.

²⁰ Close, D.C., Davidson, N.J., Johnson, D.W., Abrams, M.D., Hart, S.C., Lunt, I.D., Archibald, R.D., Horton B. and Adams, M.A. (2009) Premature decline of *Eucalyptus* and altered ecosystem processes in the absence of fire in some Australian forests. *Botanical Review* **75**, 191–202.

²¹ Penman T.D., Christie, F.J., Andersen, A.N., Bradstock, R.A., Cary, G.J., Henderson, M.K., Price, O., Tran, C., Wardle, G.M., Williams R.J. and York, A. (2011) Prescribed burning: how can it work to conserve the things we value? *International Journal of Wildland Fire* **20**, 721–733.

²² Vanclay, J.K., Prabhu, R. and Sinclair, F.L. (2006) *Realizing Community Futures: A Practical Guide to Harnessing Natural Resources*. Earthscan, London. 153 pp.

²³ Attiwill, P.M. and Adams, M.A. (2008) Harnessing forest ecological sciences in the service of stewardship and sustainability: a perspective from ‘down-under’. *Forest Ecology and Management* **256**, 1636–1645.

²⁴ Vanclay, J.K. (2011) Carbon and forests: the big picture. *Australasian Science* **32**(1), 4.

²⁵ Roberts, K.G., Gloy, B.A., Joseph, S., Scott N.R. and Lehmann, J. 2010. Life cycle assessment of biochar systems: estimating the energetic, economic, and climate change potential. *Environmental Science and Technology* **44**, 827–833.

²⁶ Nambiar, S. (2010) Sustainability of eucalypt plantations in Australia is failing. *Australian Forestry* **73**, 207–208.

²⁷ Vanclay, J.K. (2007) A new approach to farm forests based on incentives rather than punitive regulation. *Australian Forest Grower* **29**(4), 28–32.

²⁸ Adams, R. (2009) Forestry and wood products research and promotion moves with the times. *Australian Forestry* **72**, 147–148.