

Why ‘A forest conscienceness’?

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Peer reviewed contribution

Keywords: Lane Poole, conscienceness, conscious, conscience

ABSTRACT: The phrase ‘a forest conscienceness’ was used in a major statement made by Charles Lane Poole, Western Australia’s Conservator of Forests from 1916-1921, for the 1920 British Empire Forestry Conference. It is both relevant and contemporary at the beginning of the 21st century. We chose it as the conference theme to encourage engagement with both a conscious awareness of forests and their values, and a sense of moral responsibility toward forest management. It stimulated a broad range of lively contributions that emphasized mainly the ‘awareness’ aspect, although some authors addressed ‘moral responsibility’. Perhaps ‘conscienceness’, like sustainability, is an evolving concept not yet fully mature. It warrants further engagement.

1 ORIGIN OF THE TERM ‘CONSCIENCENESS’

To our knowledge, ‘conscienceness’ does not appear in any dictionary. We encountered it in a major statement made by Charles Lane Poole, Western Australia’s Conservator of Forests from 1916-1921, for the 1920 British Empire Forestry Conference. In outlining steps to protect the state’s forest resources, he argued for:

A publicity campaign in Western Australia, the object of which would be to form a strong public opinion regarding the proper management and utilisation of the forest heritage of the State. Some foresters who have visited this State have been so disheartened by the condition of affairs they have found that they have said that there will be no forestry in Western Australia until the last tree has been cut down. I do not hold this pessimistic view, but consider that, by a publicity campaign, the democracy will realise the wealth that the forests represent. It is true

that trees to-day [*sic*] have no votes, but when the people develop *a forest conscienceness* [*sic* – emphasis ours] the position will be entirely altered, and they themselves will see to it that the forest policy is maintained and the forests are used for the benefit of the community as a whole for ever, and not for the benefit of the few sawmillers, timber hewers, and timber merchants of to-day [*sic*]. (Lane Poole 1920a, p. 34)

This paragraph, written over 80 years ago, is both relevant and contemporary at the beginning of the 21st century. Lane Poole's numerous publications and string of senior positions—including District Forester in the Transvaal, creator of the first Forest Department in Sierra Leone, Conservator of Forests in Western Australia, head of both the Australian Government's Forestry and Timber Bureau and the Australian Forestry School—are testament to his ambition, intelligence, energy, professional standing and dedication to policies of state forestry predicated on sustainable management. However, he was also hot-tempered and he resigned from two positions in protest because he could not accept government policies. His actions could be interpreted as either expressions of high principles or naiveté in failing to negotiate with strong political opponents.

In 1916, when Lane Poole took up his post as Conservator of Forests in Western Australia, the fledgling State, first colonised by Europeans in 1826, had a thriving but largely unregulated timber industry based principally on the local hardwood, jarrah (*Eucalyptus marginata*). By 1920, the year of his 'forest conscienceness' statement, '...nearly one million acres [c. 404, 694 ha] of the jarrah forest [had been] cut over for the removal of 750 million cubic feet [c.21.2 million m³] of logs, causing a reduction of almost 50% in the forest canopy' (Wallace 1965, p.35). There were intense land-use conflicts between agricultural clearing and long-term forestry, bitter complaints of waste in the timber industry, and repeated, extensive government inquiries (Mills 1989). Furthermore, conservation reserves were few and vulnerable: in 1894 an area of 65 000 ha of jarrah forest was declared a reserve for flora and fauna preservation following an application by Bernard H. Woodward, curator of the Western Australian Museum and secretary of the Western Australian Natural History Society. Woodward had chosen the site as it seemed inaccessible and unattractive to selectors. However, applications to cut timber in the reserve were received after only three years and in 1911, following pressure from the timber industry, it was converted to a timber reserve (Moore 1993, pp.121-130, see also Rundle 1997). Against this background, Lane Poole's great achievement was drafting the Western Australian *Forests Act* 1918 (proclaimed in 1919). The Act began the reservation of large areas of forest as State Forests for long-term, sustainable timber production and it also restructured the Woods and Forests Department as a new Forests Department. A key part of Lane Poole's task was to raise awareness for both the many values of forests and the moral responsibility for their management. He strove for his vision of both these matters in his British Empire Forestry Conference statement.

The statement emphasizes that Lane Poole's conscious awareness of forests was primarily economic, but centred on a firm belief in sustainable management of the timber resource. His descriptions of a wide range of tree species from the south-west are strictly utilitarian and there are repeated assertions of the wealth provided by the forests. These were often represented in the analogy of forest capital (the volume of timber in the forests) and forest interest (the annual growth of wood produced by the forest capital). His forest conscience clearly held that it was morally wrong to use the forests unsustainably: 'We have been mining our forests and have cut capital as well as interest' (Lane Poole 1920a, p. 32). He railed against waste and exploitation in vivid, colourful language, often with strong overtones of biblical imagery. Thus the use of high-grade jarrah timber for railway sleepers rather than structural beams or fine furniture is 'sheer prostitution', exploitative mills 'butcher' timber and are 'mining our forests', and there is a hellish reference to 'the fire which is lit when the mill starts and goes out when there is no more timber to butcher' (Lane Poole 1920a, pp. 32-3).

His other writings reveal an awareness of a wider range of forest values. His textbook, *A primer of forestry: with illustrations of the principal forest trees of Western Australia* (Lane Poole 1921) includes descriptions of non-tree vegetation and the fauna. Although they are often given a utilitarian slant (animals are described as pests or helpful, for example), it is still a significant advance

beyond ignoring them. Similarly, he acknowledged how aesthetic values are lost when old-growth forests (he uses the term 'over-mature', see below) are converted to production forests:

When what remains of the present over-mature crop of jarrah and karri has been cut down, it is unlikely that specimens equal in bulk to what the forests have already yielded or still possess will be seen by future generations. When the State's forests have become "cultivated", trees will be cut when they reach maturity. Sentiment may dictate the preservation of a few for a period far beyond that of maturity, as reminders of the giants of former days, but whole forests of giant trees will no longer be seen. (Lane Poole 1920b, p. 130)

Although his utilitarian view predominated, it was not the sum of his awareness of the significance of forests.

We can never know whether Lane Poole used the neologism 'conscienceness' deliberately to encapsulate both his awareness of the economic value of forests and his moral or ethical position regarding their wise use, or whether the word was simply a mistaken rendering of 'consciousness'. Arguments in favour of deliberate use include Lane Poole's generally excellent command of language and the fact that the statement was a major written document prepared for a very prestigious conference. He also may have been influenced by language experimentation, current in some of the day's influential literature. However, regardless of whether 'conscienceness' was a neologism or an error, it caught our imagination and has a contemporary ring. We chose it as the conference theme to stimulate deliberations on differing perceptions of forest management and the associated moral dimension.

2 STRUCTURE OF THE CONFERENCE

The challenge for the conference was to attract as many different viewpoints as possible that addressed the twin strands of 'consciousness' and 'conscience' in the conference theme. According to the Macquarie Dictionary (1985), consciousness means 'awareness of one's own existence, sensations, cognitions etc.'. Contributions to this strand seek to express cognitions or to awaken awareness of particular perspectives. The Macquarie Dictionary defines conscience as 'the internal recognition of right and wrong as regards one's actions and motives'. Thus contributions to this strand involve an explicit moral dimension. Integrating these two strands is demanding, because the perceptions of forests and the values attached to them are now extremely varied. As United States forester Jay O'Laughlin observed, one problem is to give proponents the opportunity to interact rather than go their own way:

Forest health, sustainability, and ecosystem management are of interest to many people. The ambiguity of these terms encourages people to engage in forest policy discussions because their own ideas have not been predefined out of the debate. If foresters can't define forest health, or if their definition is unacceptably narrow, people will likely seek opinions about forest management elsewhere. Thus the forest health analogy is a powerful, but imperfect, metaphor for communicating with the public. (O'Laughlin 1996, p. 21)

Ecologist Roger Hilborn highlighted a critical second problem:

... one person's level of acceptable change will be another person's ecological catastrophe. (Hilborn 1996, p. 165)

As our strategy to integrate many viewpoints and to encourage the wide communication O'Laughlin envisaged we chose to bring together people from many different disciplines with an interest in forest history and management. Historical perspectives can inform and guide both management of

forests and the hypotheses and investigations of natural scientists. Similarly, historians, hearing scientific and management issues and concerns, may be stimulated to highlight relevant examples from the past. Representatives of non-government organizations can gain a more detailed understanding of contemporary management, historical roots and present rationale. By encouraging these diverse groups to participate in one forum, we sought an exchange of views on their collective consciousnesses and consciences which would at least raise awareness to the point where Hilborn's arguments regarding different perspectives could be appreciated.

The six symposia were chosen to encourage contributions from several disciplines to forest history and its lessons for contemporary management. 'Forest Consciousness' made a direct appeal to the imagination. 'Reconstructing pre-European Forests' and 'Evolving Sustainability' attracted to historians, natural scientists (including foresters, ecologists and natural resource managers) and non-government organizations and encouraged interactions. 'Ecosystem Health' encouraged scientists, health practitioners and non-government organizations to participate. 'Conflicts Over Forest Use: History and Resolution' offered the opportunity to place contemporary debates in a historical context. Finally, the 'Open Forum' allowed contributions outside the other symposia.

3 RESPONSES OF THE AUTHORS

The conference attracted over 100 delegates and 70 spoken papers (65 of which are included in these proceedings), including contributions from professional and amateur historians, social scientists, natural scientists (ecologists, environmental scientists, foresters and engineers), natural resource managers, retired timber industry workers and members of non-government organizations. Fifty-two papers consider Australian issues (including 36 with a Western Australian focus), reflecting the membership and general interests of the Australian Forest History Society and the conference venue. There are also papers with New Zealand, South-east Asian, North American, South American and South African settings and nine contributions with an explicit international perspective. The size of the meeting and the level of international involvement confirm that the conference theme and structure had wide appeal. Authors in this proceedings volume respond to the theme in many different ways.

3.1 *Lane Poole's legacy*

Dargavel, Robin and Wood address the conference theme by reviewing Charles Lane Poole's career. All emphasize how his conscious awareness and moral responsibility were the product of his individual training, experience and social milieu, but were still original and innovative for the time. Williamson *et al.* evaluate Lane Poole's greatest Western Australian achievement, the *Forests Act 1918*, and its immediate legacy in the period 1919–1935. Paramount to this assessment is the description of the virtually unrestrained exploitation that Lane Poole inherited and sought to remedy by inculcating the values of wise use into Western Australia's Forests Department. Robin further highlights the significance of Lane Poole's legacy at a national level. He believed in public education programmes ascribing both economic and moral values to natural resources, reflecting the involvement of government rather than corporations or philanthropists in these areas in Australia. This philosophy continues in the contemporary concept of 'ecosystem services', which ascribes economic, social and ecological significance to natural resources.

3.2 *Conscious awareness of forests*

The papers in these proceedings show an extraordinary diversity of 'conscious' awareness of forests and their history. One of the most persistent conceptions is that of the economic value of forests, which was one of the values Lane Poole (1920a) promoted. However, while economic value is still recognized widely, there is considerable debate about how to quantify it and the implications different conceptions of economic value have for forest use. Thus Lane argues that Western Australian forests were undervalued in Lane Poole's time because timber was wasted or used for

low-grade purposes such as railway sleepers rather than construction or fine furniture. Lane argues that contemporary management is no improvement, because the returns to government from native forest logging fall short of the costs of management. Such challenging and controversial analyses are undertaken increasingly elsewhere (e.g., Turner *et al.* 2003, Chopra and Kumar 2004), although sometimes they are hampered by difficulties in obtaining relevant data (Chindarsi 1997). Implications of forest valuations, distributing forest-generated wealth and balancing conflicting values are pressing concerns addressed in several papers (e.g., Shrestha and McManus, Lumley, Miller), as is considering economic values in evaluating management options (Terry *et al.*).

A further issue in assessments of conscious awareness of forests was the risk of losing largely undocumented perceptions. For example, Davies' focus on the experiences of children in nineteenth century Victorian mill towns, Bradshaw's assessment of the regeneration of work performed by sustenance workers in Western Australian forests during the Great Depression, Gardner's accounts of his work in the Western Australian timber industry, Goodacre's description of life in the timber community of Karridale, Hagan's discussion of conserving non-Indigenous cultural values in Western Australian forests, Becker's description of conserving places of social significance in Tasmanian forests, Hewett and Sclater's documentation of pine logging in Western Australia and Sclater's meticulous records of how Western Australian forest blocks were named all highlight the diversity of experiences at risk of being lost without historical documentation. Bunbury synthesizes many experiences collated in his years as a radio broadcaster, giving voice to these otherwise forgotten stories. Another significant point to emerge is that awareness is deeply rooted in contemporary culture, but may change with experience throughout a lifetime, as is exemplified by the studies of the life and achievements of Georgiana Molloy (O'Brien, Patrick and Maslin). It is also possible for participants in the same events to form very different historical 'truths' of their experiences (contrast Smart and Mills). This reinforces the need for a wide documentation of views and experiences.

Reconstruction of past landscapes and the views and practices of the people who used them is a special case. Dortch and Lloyd and Krasnostein focus on the particular case of Indigenous perceptions and uses of forested landscapes. Although there are significant difficulties in reconstructing Indigenous attitudes and practices and there is rarely, if ever, a single Indigenous experience in broad landscapes, these papers clarify worthwhile information for contemporary management seeking solutions for co-existence with forested environments. Studies of both Indigenous perspectives and the experiences and perceptions of Europeans encountering new forested environments benefit from historical, archaeological and palaeoecological analyses. Whether these involve detailed analysis of biological records (Boswijk *et al.*, Martin and Ogden, McCaw *et al.*), contemporary literature or art (Beattie), primary historical sources (McPherson, Star) or combinations of these (Butz), they all challenge preconceptions of the characteristics of past forest environments and point to a diversity of past perceptions.

Many papers highlight the diversity of contemporary forest awareness and the challenge of incorporating the diverse views into a widely acceptable forest management policy, especially given the complex and contradictory views of some groups of stakeholders (Head and Muir, Brueckner). Examples of values considered include spiritual dimensions (Christensen), forest 'health' (Gilles and Horwitz), uses of timber (Johnson) and conservation values (Beattie, Worth, Watson). Proposed solutions include a conflict resolution model (Utomo), perspectives on community-driven solutions (Shrestha and McManus, Wardell-Johnson and Calver) and consultative, community-based decision taking (Terry *et al.*). Lush gives a cautionary perspective, based on his career as a forester, warning against management fads that marginalize the views and experience of specific professional groups. Conflicts can arise from the clash of different consciousnesses. Whether this is expressed in overt military aggression (Bae), economic imperialism (Bae and Gismondi and Mouat) or lobby groups and political activism (Lunney, Sharp), its resolution is critical in successful management in a diverse range of national settings (Baird, Blackwood and Wardell-Johnson and Calver). It is also critical to recognize that popular consciousness and professional conscience may differ, and that communication and respect are needed to combine them (Watson, Abbott and Lennon). Bigler-Cole synthesizes many of the divergent consciousnesses by asking if the historical

and social science perspectives can mix with those from the sciences, allowing management to make both scientifically and socially responsible decisions.

3.3 *Forest conscience*

Conscience, or moral responsibility, is explicit in only a few papers. Wood examines Lane Poole's moral views on forests, developing the idea that conscience proceeds from character. Thus, his political wrangles arose from specific socio-political circumstances and also from his own character and convictions. Abbott and Lennon explicitly examine a modern version of this dilemma by assessing the conflict between a popular conception that placing forest in reserves achieves conservation goals, and a professional conception that conservation needs on-going management. Lennon adds the complementary idea that a heightened public awareness of the cultural value of forests will eventually be accompanied by a moral conscience of the need to conserve them. Thus popular consciousness and professional conscience may ultimately merge.

Several papers imply issues of conscience or moral responsibility. This underpins Hardwick's assessment of sustainable logging in Western Australian forests and McBain's reminiscences of his involvement in them, while moral disquiet about the woodchipping industry's impacts on native forests is evident in the responses of Schultz and the subjects studied by Chapman. A developing conscience may also have underpinned the career direction of bureaucrats such as Edward Turner in New Zealand (Roche), May Holman's and Katherine Susannah Prichard's concern for the safety conditions of timber workers (Bolton), or the motivations of stakeholders contesting forest management at Goolengook in Victoria (Nelson). Overall, the papers address conscience (moral responsibility) less frequently than consciousness (awareness).

3.4 *Interdisciplinarity*

A further goal of the conference was to attract contributions from natural scientists as well as historians, thereby drawing on differing disciplinary perspectives to illuminate forest history. There was mixed success. In some cases, different perspectives are melded in individual papers to achieve a genuine interdisciplinary approach. For example, Stubbs and Specht collaborate across different scientific disciplines to illustrate the potential and pitfalls of ecotourism in achieving conservation goals, while Evans gives a historian's perspective of the consequences of water catchment policy - normally a scientific domain - on forest use.

However, in far more papers, scientists give their own views on political issues or forest history. For example, Archibald *et al.* give a scientific view of changes to tuart (*Eucalyptus gomphocephala*) woodland in Western Australia over 40 years, drawing on specialist insights into population ecology and plant pathology. Similarly, Dell *et al.*'s history of the management of the exotic plant pathogen *Phytophthora cinnamomi* in Western Australia is strengthened by their detailed understanding of vegetation associations and plant pathology, Stoneman *et al.* bring a silvicultural perspective to the history of management practices while Mattiske and Havel's detailed understanding of computing and vegetation mapping illuminates their coverage of the history of vegetation mapping in south-western Australia. Spooner and Lunt and Heady document how technological developments increase understanding of topics as diverse as vegetation history and the microstructure of important timbers.

Although this latter group of papers strays from what is often regarded as the domain of forest history by giving only a brief historical context to a more substantial, specialist account, there is considerable value in having a wide range of perspectives. While not strictly interdisciplinary in the sense of integrating different disciplinary perspectives in one paper, these contributions ensure that those normally outside forest history are encouraged to consider the historical context of their work, while historians benefit from a range of specialist insights into past events.

4 TWO CHEERS FOR CONSCIENCENESS

To paraphrase essayist E.M. Forster's views on democracy, the theme of 'forest conscienceness' deserves two cheers. One is for stimulating wide interest in forest history, which contributed to a broad and lively conference and also to proceedings of great interest to historians, scientists and managers seeking diverse views on the evolution and current nature of forest values. The second is for legitimizing diverse perspectives. Although few papers are genuinely interdisciplinary in the sense that perspectives from multiple disciplines are integrated in a single paper, the contributions as a whole do give many opportunities to 'think outside the box'. Forest conscienceness falls short, though, of the third cheer because of the limited explicit engagement with 'conscience' rather than 'consciousness' in many of the papers. Thus while many views (consciousnesses) are presented, their moral implications (conscience) are discussed less frequently. Perhaps 'conscienceness' was simply too confusing a neologism to be successful. Alternatively, like sustainability, it may be an evolving concept not yet fully mature. We believe the links between 'conscious' and 'conscience' warrant further engagement.

REFERENCES

- Chindarsi, K. A. 1997. The logging of Australian native forests. *The Australian Quarterly* 69: 86-104.
- Chopra, K. & Kumar, P. 2004. Forest biodiversity and timber extraction: an analysis of the interaction of market and non-market mechanisms. *Ecological Economics* 49: 135-148.
- Hilborn, R. 1996. Do principles for conservation help managers? *Ecological Applications* 6: 364-365.
- Lane Poole, C. E. 1920a. *Statement Prepared for the British Empire Forestry Conference, London, 1920*. Perth, Western Australia: Western Australian Government Printer.
- Lane Poole, C. E. 1920b. *Notes on the Forests and Forest Products and Industries of Western Australia*. Perth, Western Australia: Forests Department of Western Australia.
- Lane Poole, C. E. 1921. *A Primer of Forestry: With Illustrations of the Principal Forest Trees of Western Australia*. Perth, Western Australia: Department of Education, Western Australia.
- Macquarie Dictionary 1985 (budget edition). West End, Queensland: Herron Publications.
- Mills, J. 1989. The impact of man on the northern jarrah forest from settlement in 1829 to the Forests Act 1918. *The Jarrah Forest: A Complex Mediterranean Ecosystem*. Ed. B. Dell, J. J. Havel, N. Malajczuk. Dordrecht: Kluwer Academic Publishers. Pp. 229-279.
- Moore, B. 1993. Tourists, Scientists and Wilderness Enthusiasts: Early Conservationists of the South West. In *Portraits of the south west : Aborigines, women and the environment*. Crawley: UWA Press, pp.110-135.
- O'Laughlin, J. 1996. Forest ecosystem health issues: definition, measurement and management implications. *Ecosystem Health* 2: 19-39.
- Rundle, G. E. 1996. History of conservation reserves in the south-west of Western Australia. *Journal of the Royal Society of Western Australia* 79: 225-240.
- Turner, R. K., Paavola, J., Cooper, P., Farber, S., Jessamy, V. Georgiou, S. 2003. Valuing nature: lessons learned and future directions. *Ecological Economics* 46: 493-510.
- Wallace, W. R. 1965. Fire in the jarrah forest environment. *Journal of the Royal Society of Western Australia* 49: 33-44.