

AUSTRALIAN MINING HISTORY ASSOCIATION BOOK REVIEW

The Burning Mists of Time: A Technological and Social History of Mining at Katoomba

Philip J. Pells and Philip J. Hammon (Written & compiled by), with contributions from Amanda Mackie, Karen Carlson and Brian Fox, 2009.
WriteLight, Blackheath, NSW, v, 258 pp., ill., maps.

This fine production with many stunning photographs, old and new, and a plethora of maps, is a tribute to the enthusiasm and dedication of the two principal authors and their support team, who have walked, climbed and excavated, unearthing both the artefacts and manuscripts of a fascinating and important history of mining in a region mainly known to most as a scenic tourist landscape.

Their work has brought together information from a variety of long-forgotten documents, combined with their own expert observations, to explain the extraordinary story of coal and oil-shale mining in the Katoomba area. It is a story which shows the brilliance of engineers and miners in attempting to overcome the practical problems of a very difficult terrain, one of beauty and, in many ways, of menace.

There are 14 chapters, supplemented by seven appendices. The first four chapters are, in a way, introductory, but important to the overall story, outlining the geology of the region, rocks that burn, early entrepreneurs, and the relatively little remembered story of oil-shale mining in New South Wales. Then follow what to me is the meat of the book, six chapters dealing with specific mineral exploration of the valleys adjacent to Katoomba, mining itself and the technologies designed, (some in Germany, some locally) and tested, during the various periods of exploitation between 1865 and 1945. This main section concludes using the life of a coal skip, Cecil, with Bertie the bucket, to explain the workings and changes in technology in carrying coal and oil shale from the mines of the valleys to the Katoomba plateau. An additional related chapter (13) tells the story of how the mining technology has been adapted, since mining ceased, to become one of Australia's most successful tourist attractions, the Scenic Railway and Skyway.

The remaining chapters deal with the living conditions of the mining families, Aboriginal occupation, perhaps misplaced at Chapter 12, rather than as the second chapter, and the final chapter, The Recovery of the Forests and the Return of the Lyrebirds. This is a discussion of the ecological changes of the valleys since mining ceased and the region became part of the World Heritage listed National Park. It is interesting that the senior author, Philip Pells, a civil/mining engineer, first became interested in the area in 1980 through examining the massive Katoomba 'Dogface' rockfall, which happened nearly fifty years earlier (1931) and which owed its occurrence to the final mining (pillar extraction) which had taken place immediately below.

The Appendices cover a wide range of topics, three dealing with aspects of the lives of important players in the mining story, viz. Campbell Mitchell, Oscar Schulze and the Bleichert and Saddington families. Other significant personalities, such as Norman Selfe, Robert H. Reynolds, are given 'boxed' treatment in earlier chapters.

There is an extensive table of mining residents at South Katoomba in 1892, additional information on the mining leases and on Land Surveys and there is a comprehensive index.

The first appendix is a special delight for the authors, as it documents, probably for the first time, the apparently earliest mention of European discovery of coal in the Blue Mountains in a letter from Governor Hunter to Sir Joseph Banks, 20 August 1796. The authors make the point that the discovery, by William Paterson, was possibly as early as September 1793, predating by some nine years the well-known reporting of such an occurrence by the French naturalists, Joseph Bailly and Louis Depuch, at the same locality, the mouth of the Grose River, as discussed at the beginning of Chapter 2.

In accordance with what is becoming common practice the authors have set up an internet web site, www.scenicworld.com.au/bmot where the references are listed, new photos posted and readers encouraged to contribute research.

There are a few points over which I will quibble. In the opening chapter, *The story of the Rocks*, some confusion, I feel, is introduced on page 2 by describing the formation of the Lithgow Seam from a thick peat deposit, then a sentence or two later referring to the deposition of 'corals and reef creatures' followed by a return to peat formation for the formation of the Katoomba/Bulli Seam. In the western coalfields there is no evidence of a marine period of deposition between these seams. The authors have taken the Hunter Valley geological story where marine deposition occurred between the formation of the much older Greta Coal Measures and the later Newcastle Coal Measures. Perhaps they also overdramatised the significance of the end of Permian extinctions in the story of the Sydney Basin. Undoubtedly the *Glossopteris* flora died out but it was quite rapidly replaced by other flora, such as can be collected in the Triassic rocks closely overlying the uppermost coal seam in the Blue Mountains.

I feel that the geological story would be enhanced by developing the story for the period following the cessation of deposition in Triassic times, as, in the text we move directly from this deposition to the present landscape, the formation of which baffled the early explorers and naturalists such as Charles Darwin, who got it quite wrong, and later geologists such as E.C. Andrews, who got carried away by Davisian concepts of peneplanation. The formation of the Blue Mountains plateau and the deep valleys by water and abrasive erosion certainly baffled early naturalists, and continues to pose problems for present day geomorphologists. Matters such as uplift (how much and when), erosion (by what processes), and structure (joint control, beautifully shown in the Dog Face Rockfall photos) would clarify this story, I feel. These are discussed at a layman's level in the NSW Geological Survey's well-illustrated *Layers of Time* booklet.

While due credit is given to the Rev. W.B. Clarke for his work on the stratigraphy of the Sydney Basin, it took him a long time to accept the Permian age of the Coal Measures, a matter which was clear to James D. Dana who examined the rocks of the basin with Clarke in 1839–40. Clarke's voluminous correspondence shows his struggles to sort out the geology. Much of this correspondence, although lacking most of the valuable sketches Clarke made, appears in the 2-volume *The Web of Science*, edited by Ann Moyal (published in 2003).

While there are appropriate references listed in the chapter on the Aborigines, it is rather surprising that, although (Eugene) Stockton is referred to in a quotation from Geoff Mosley (p. 168), his comprehensive work on this topic (edited with John Merriam) *Blue Mountains Dreaming*, (first published 1993, with a new edition in 2009) is not referenced. The photos in this chapter lack captions. The contacts with the Aborigines made by Francis Barrallier (he kept the double 'l' in his name, despite being baptised with only one, see p. 168) are more fully dealt with in Andy Macqueen's *Blue Mountains to Bridgetown: The life and journeys of Barrallier 1773 – 1853* (published 1993). It should also be mentioned that Thomas Jones' trip from Hartley down the Cox (p. 171) was essentially an extension of the journey undertaken just three weeks earlier up the Warragamba and Cox by Jamison, Jones and others, including an Aboriginal, Gilderoy. Footnote 10, Thomas Jamieson is surely an error?

Scattered through the text are a few spelling errors (e.g. for names: Rylstone, p.1; Liversidge, p. 18), and grammatical errors such as 'comprised' for 'composed', along with missing hyphens that have escaped 'spellchecker'.

However, all the nitpicking in the latter part of this review is just that. This book presents for the first time a knowledgeable account of a hitherto neglected aspect of the Australian mining story, told with the enthusiasm of personal involvement in the unearthing of so much forgotten and neglected technology. While it will attract 'ordinary' visitors to Scenic World, it will be of special interest to mining enthusiasts, and an encouragement to mining historians to tell similar stories as well as this one has been told.

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