

## AUSTRALIAN MINING HISTORY ASSOCIATION BOOK REVIEW

***110 degrees in the waterbag: a history of life, work and leisure in Leonora, Gwalia and the northern goldfields.***

**Editors Lenore Layman and Criena Fitzgerald, 2012.** Western Australian Museum, 24cm, 461 pp. ill., maps, photos, p/back, \$39.95.

The publication *110 Degrees in the Waterbag* represents the work of a team associated with The Leonora Historical Research Project which captures the chequered history of communities in the vicinity of Leonora, Western Australia from the late nineteenth century to recent times. The research not only investigates mining developments in this isolated and desolate area but also embraces other activities, especially pastoralism, and the effect of developments on the original Aboriginal inhabitants. Much of the comment in the book is seen through the eyes of past inhabitants, many of whom were Italian or Slav immigrants attempting to improve their material wellbeing. The term '110 in the Waterbag' is a synonym for the harsh unforgiving environment in which the local communities lived and suffered – for indeed, the book highlights the individual and community hardships, the disappointments and struggle for survival, although it also presents the triumph of the human spirit and the close-knit relationships that bound the communities together.

To edit a compendium of chapters from a number of contributors in a team project is no easy task and although the editors have in large part produced an excellent coverage of developments, there is a weakness emanating from the team effort, in that while some of the contributors have managed to present their chapters with literary flourish, thus leading to interesting reading, others have tended to be rather more turgid, something unlikely to win plaudits from the general reader.

Yet another problem is that while the range of topics covering aspects of life on the northern goldfields is wide in scope, such variety tends towards superficiality for some of the chapters, leaving the reader wanting to know more, or to wonder whether these sections are merely space-fillers. One other negative, which might be a personal quibble, is the layout of the book which tends to follow the format found in many (especially economic and other technical) textbooks these days, of interspacing the dialogue with blocks of information related to, but not part of, the dialogue – something that is a distraction, as it breaks the flow.

But apart from those negatives, there is a great deal to recommend. Much of the mining emphasis is concentrated on the Sons of Gwalia goldmine, though in a nicely flowing chapter on 'other mining', Peta Chappell raises the salient point that there was more than gold to be won in the locality. This stimulating chapter encompasses geological information with historic developments of the trials and tribulations associated with development of copper, zinc and nickel mining that have been significant in the local and national sphere up to and including present times. In light of the time it takes to develop infrastructure today, its salutary to note that in the early 1900s, it took only 4 months from ordering plant in Adelaide to producing the first ingot of copper at the Anaconda Copper Mine, Ealaminna. Chappell concluded with the staggering statistic that in 2009-2010, the value of mineral commodities in the Shire of Leonora reached \$2,414,778,934.

AMHA members will be especially interested in Patrick Bertola's introduction to the development of the Sons of Gwalia GM that looks at the origins and economic milieu in which the mine was established. The description includes the attempts of Herbert Hoover to reduce costs by introducing 'Taylorism' and by recruiting Italian and Slav miners. This section is complemented by Richard Hartley's informative discussion of the technical difficulties met and overcome in developing the mine, including development of the 'all sliming process' and adoption of 'precipitation by charcoal' that was a forerunner of the pulp-in-carbon process of mineral recovery.

Related to these sections, Phil Bianchi examines the history of the Woodlines that supplied fuel and timber to the Gwalia mine, and brings out the hardships experienced by the hewers and carriers of wood. In total, some 670 km of rail were laid between 1903 and 1963, and 120,000 hectares cut out to supply the mines with wood. Of interest was the description of the makeshift camps of these cutters and loaders, who would periodically be shifted from camp to camp with their cabins preceding them on the Woodline trains. Theirs was a hard life, and only in the late 1950s were power saws introduced.

Both Lenore Layman and Criena Fitzgerald provide insights on the health and accident issues that accompanied mining in what was a harsh environment for both miners and their families. The accident rate from rock falls, plant failures, premature detonations and fumes was horrendously high, with 139 deaths being recorded in the district between 1896 and 1960, although as the author says, because of definition issues, the true level of mine related deaths is greatly underestimated. As well as facing such tragedies, the families of victims were faced with a management that was reluctant or hostile to recognising its responsibilities to the survivors and their next of kin, with many relying on communal support and payments from Friendly Societies to eke out an existence. The section reveals a startling statistic that shows 21 miners committed suicide in the period by 'placing dynamite in their mouths and blowing their heads off'!

Lest readers think that aspects other than mining have been ignored, there is a well-developed chapter on pastoral activity by Elizabeth Hof who points out that while there was some antagonism between mining developers and pastoralists, a certain symbiotic relationship existed whereby the respective activities were complementary. The pastoralists could rely on a regular market for their meat in the vicinity and in times of pastoral decline opportunities to supplement incomes could be found in supplying services or labour to the miners. In more recent times, as low prices hit pastoralists, mining companies saved the day by buying or leasing pastoral properties where they were unhindered in their efforts to explore the mineral potential of the country. In 2009, mining companies owned some 13 out of 24 pastoral companies in the area.

The fortunes of the local Aboriginal communities are also considered, and it comes as no surprise that their treatment tended to be far from benevolent at both community and government levels. While the authorities supposedly tried to maintain harmony between whites and Aboriginals in the area, they did so mainly by excluding them from Leonora and other towns. One fact revealed is that while the native inhabitants were welcomed as workers by local pastoralists, mine owners shunned them - this because of hostility and lack of cultural understanding but also because when trying to meet manning requirements on tenements, the government, under the *Mining Act of 1904*, excluded Aborigines in their

calculations. This remained the situation until parts of the Act were repealed in 1958. The lack of understanding or perhaps blatant antagonism is shown in Craig Muller's chapter, where he points out that deliberate desecration of a sacred site by miners near the Weebo Homestead in the late 1960s led, perhaps ironically, to the introduction of state-wide protection through inauguration of the 1972 *Aboriginal Heritage Act* in WA. Not that Aborigines were the only recipients of negative treatment, as illustrated in Criena Fitzgerald's section on the sad fate of Afghan cameleers who did so much to maintain the life of the local communities and mines in the early years of activity.

The development of 'community' in Gwalia and in Leonora, which were linked through the mine, yet divorced by a few kilometres and function, is another well-developed section by Lenore Layman. It shows the strength and cohesion of the locals in their fight for facilities, though as pointed out, with the recovery of mining in the 1980s and 90s when the mine was developed as an open-pit, that feeling of community became eroded with the coming of fly-in, fly-out workers – though one positive outcome has been the great improvement in quality of the local infrastructure.

Overall, this is a much-needed regional account of mining come pastoral development that embraces all aspects of economic and social life and experience in an isolated area. It must reflect the experience of other isolated areas in Australia and the publication could well serve as a template for other such studies.

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