

Geoffrey A. Randall, *Outside Mines of the Broken Hill Area*. Self published by Geoffrey Randall, P.O. Box 758, Lyndoch, South Australia, 5351, 2022. emaust15@bigpond.com. 305 pages, photographs, diagrams, maps. Cost \$70 plus postage.

Broken Hill is truly iconic, and well known worldwide. Most publications focus naturally on one of the world's greatest concentrations of silver, lead and zinc. The mines, people and companies which have played their roles in utilizing the vast wealth found at Broken Hill have all been well documented.

But Broken Hill does not exist in isolation. The Precambrian rocks in which the Broken Hill deposit occurs are some of the oldest in eastern Australia. These ancient rocks host thousands of small to medium sized deposits and mineral occurrences. Many were prospected before the recognition that the 'hill of mullock' was indeed atop incredible wealth along the Broken Hill Main Lode, and later in the excitement which it generated. Randall has sought to highlight the many hundreds of deposits surrounding the behemoth and in the adjacent region. By and large these deposits were small but some, especially the Thackaringa type veins, were fabulously rich in silver, especially in the near surface. Most are only passing mentions in the available histories.

In his self-published book, Randall has compiled an eclectic collection of material relating to the small mines, and also the small villages such as Purnamoota and Nickleville, which were established near clusters of small mines. He has used a small selection of key historic publications as the backbone of his compilation. In addition, he has drawn on information and material from individuals in the Broken Hill area, including collections of share scripts, old maps and photographs of ore specimens. He has also included details taken from personal discussions.

The book is unusual in its organization and does not follow normal referencing procedures or structure. Never-the-less it brings to the readers' attention a broad sweep of material on the lesser-known mines and the villages around them, along with various bits and pieces of social history. It is possible to dip into this book at random and find a small section on some location of interest or some social history related to the early prospecting and mining days in the region. As Randall says in his concluding remarks, 'While this review is by no means exhaustive in its coverage it may provide a starting point for other students of mining history to take up the task of following on with more detailed accounts in the future' p. 291. He has also highlighted some of the lesser-known types of deposits, such as the tin mines at Euriowie and Waukaroo, platinum deposits east of Broken Hill and some of the mysteries such as The Great Vugh mine, and the mineralogical wonders of the ABH Consuls mine. He has also detailed the establishment of the Silverton and Tarrawingee tramways.

Unfortunately, there is not a large map accompanying Randall's volume. Many of the key Government references used such as Dickinson (1972) are available in digital form from the Geological Survey of New South Wales DIGS system. The GSNSW comprehensive metallogenic mapping series, and their accompanying notes, document in great detail the geology of most of the deposits and also show details of their locations. These are also available free online and would greatly assist the reader.

Some of the sites described in the volume, such as the Day Dream mine and smelter, and the Umberumberka mine near Silverton, have become major tourist drawcards and Randall's volume will no doubt spur additional interest in the extensive mining history to be found in the region.

Robert G. Barnes