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Pictorial History of Forestry in South Australia

Rob Robinson

Introduction

South Australia has long been known as the "driest state in the driest continent" with limited natural timber resources. The small area that was available to provide timber was in high demand immediately upon European settlement. The development of an industry now entirely based upon plantations has not been by chance but rather as a result of a long series of planned and executed interventions commencing in the 1870s. The South Australian government took a leading role in establishing this sustainable forest industry.

In 1870 the surveyor general, George Goyder, raised concerns in parliament about over-exploitation of native forests and recommended the establishment of forest reserves. A Forestry Board, appointed in 1875, was given responsibility for the management and protection of 195,000 acres of remaining natural forest and cleared land, and began to develop plantations and encourage reforestation of farmlands.

This action, along with later initiatives from the colonial and later state and Commonwealth governments, charted a unique path in an Australian forestry context. The story contains many notable names and this paper mentions Goyder, JE Brown and W Gill. John Dargavel mentions many more in his paper titled *'The Lives of Forty South Australian Foresters'*.

Many documents, maps, illustrations and photographs have survived and are important primary sources for research into this development. They are often fascinating and beautiful items in their own right. As historians, we need to summarise, interpret and guide others by cherishing these as maybe no-one else will. Those with the knowledge and the interest need to provide captions with context then catalogue and share. There is interest and pleasure to be gained in doing so.

The Forest Flora of South Australia

JE Brown, including Rosa Fiveash's detailed botanic illustrations.

John Ednie Brown was recruited from Scotland by the Forest Board arriving in South Australia in 1878 as the colony's second Conservator of Forests after the short tenure of Murray. Brown approached his new role with energy and proficiency and in his first seven months, he had produced 24 operational reports including his detailed 70 page report '*Progress Report of Forest Conservancy Generally*'.

Brown is credited as author of *The Forest Flora of South Australia* and supported the project but this ended when he accepted the role of Conservator in New South Wales. *The Forest Flora of South Australia* was released in parts between 1882 and 1890. Some forty five native trees and shrubs were meticulously illustrated and described. It is one of the largest and most accurate botanical piece from Australia's colonial era. Good quality copies and plates fetch high prices when sold though perhaps not to the same level as John Gould's fauna publications.

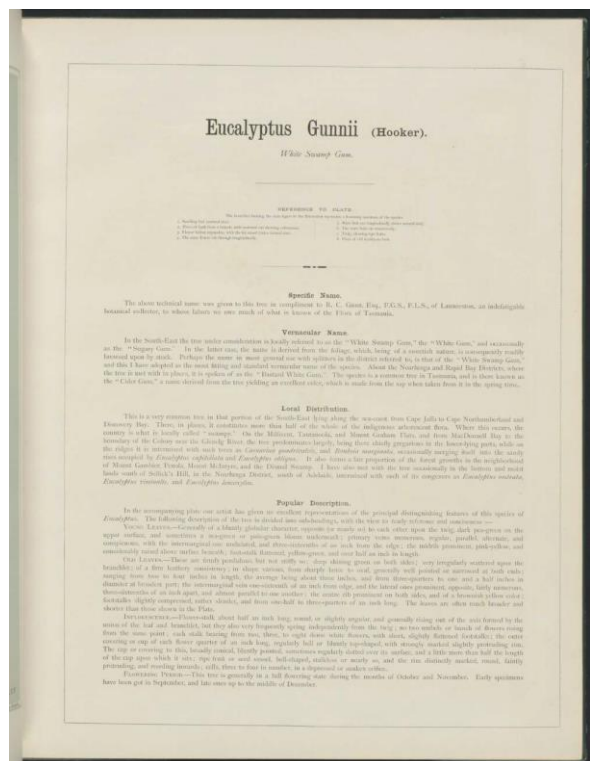
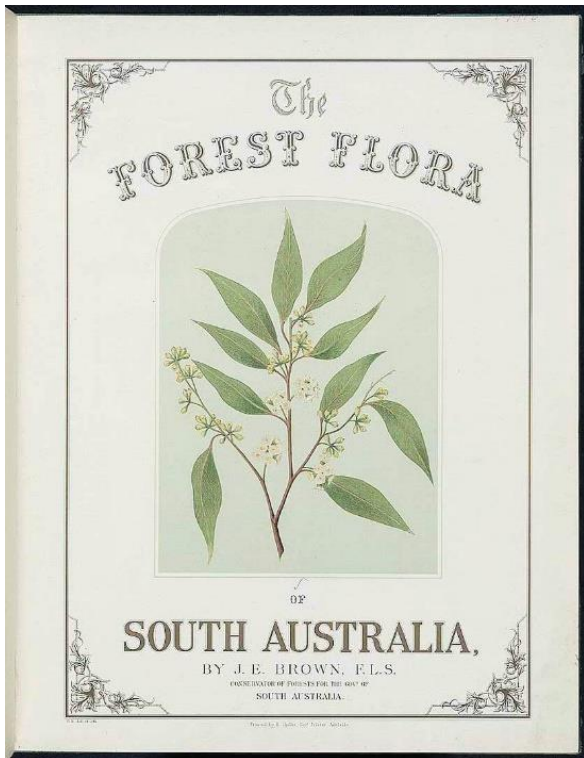
Rosa Fiveash was one of Adelaide's foremost botanical artists of her time and was invited by John Brown to illustrate *The Forest Flora of South Australia*. She drew 32 of the 45 published lithographs.



Figure 1: John Ednie Brown. *Source: State Records SA*



Figure 2: Rosa Fiveash in her Adelaide studio. We should all have ourselves painted or photographed in the midst of our passions. *Source: Unknown*



Figures 3 – 6: Title page and samples of layout and content of *The Forest Flora of South Australia*.

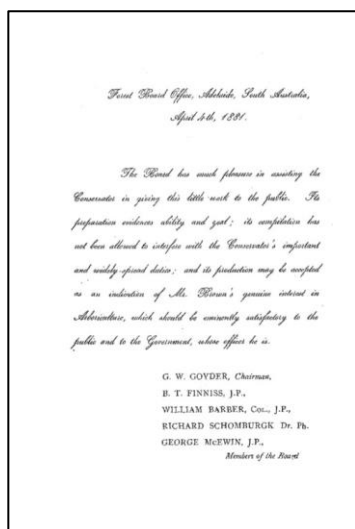
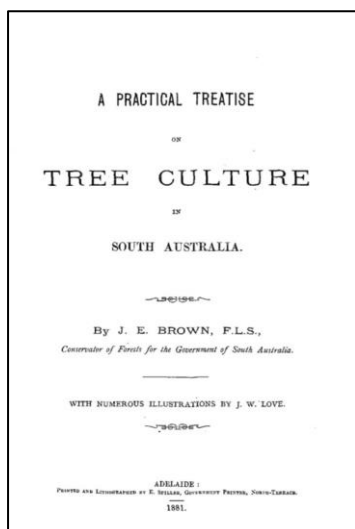
A Practical Treatise on Tree Cultivation in South Australia

JE Brown with illustrations by JW Love

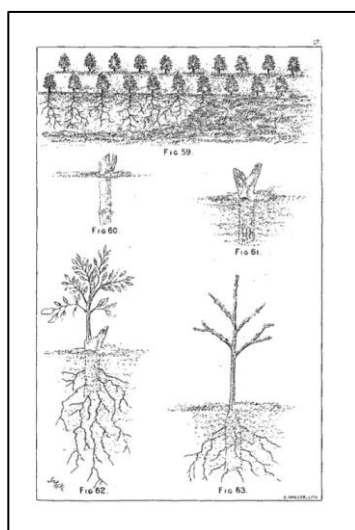
By the 1880s nurseries had been established across South Australia: Bundaleer, Wirrabara, Kapunda Reservoir, Leg of Mutton Lake at Mount Gambier, and Belair. This was to progress the prescribed functions for the Forest Board which included investigating the practicality of plantation forestry. The Board was committed to identifying suitable trees to provide free to farmers to enable mass plantings across the landscape. This supported the belief that such plantings could increase rainfall. The nurseries were also engaged in commercial activities including to support horticultural pursuits.

Another John Ednie Brown treasure is this book which he arranged for publication in 1880. Here he applies his experience and knowledge from his training and experience in Scotland and the United States of America in a South Australian context. Simply illustrated, but profusely by JW Love

This book is the 'how to' guide of its day describing planting design, species selection as well as propagation and tree management techniques. It was designed to be distributed widely to support landscape revegetation and design and 2000 copies of the first edition were given away and 1000 sold to cover production costs.



Figures 7 and 8: Title pages of *A Practical Treatise on Tree Cultivation in South Australia* 2nd edition. Note the inscription by the five member Forest Board. Source: PIRSA Forestry.



Figures 9 and 10: Examples of content and illustrations from *A Practical Treatise on Tree Cultivation in South Australia*. Source: PIRSA Forestry.

The meticulous forest management plans by forestry folk past

Those interested in forest history have access to many detailed forest plans produced by dedicated but largely uncredited Woods and Forest Department officers. A substantial number of these remain and many have been scanned with the aim of being available online.

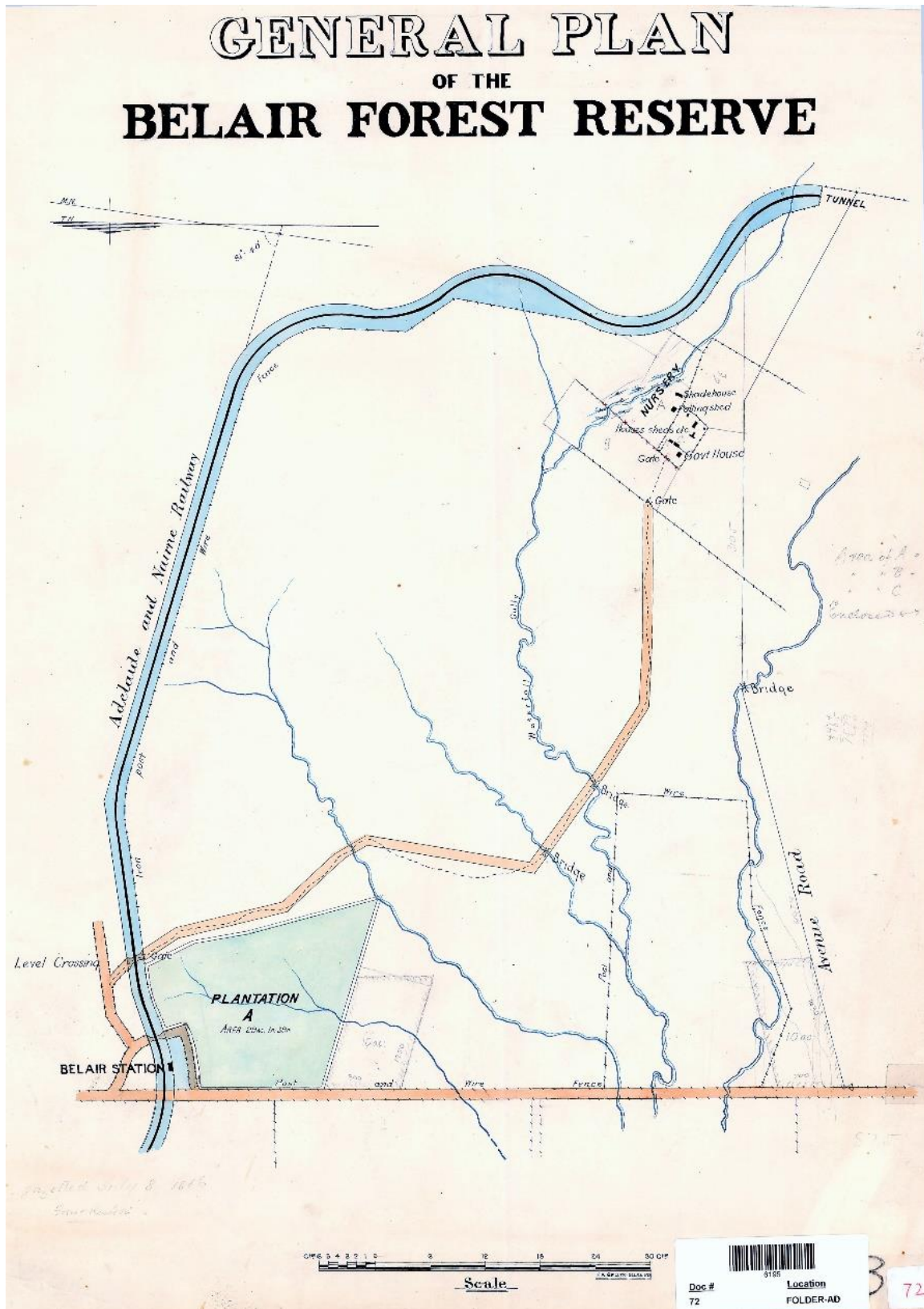


Figure 11: Belair Forest Reserve (c.1880). Belair was proclaimed as Australia's second National Park after Royal National Park in Sydney but most of the area was forest reserve before this. Note the Governor's summer residence. *Source:* PIRSA Forestry.

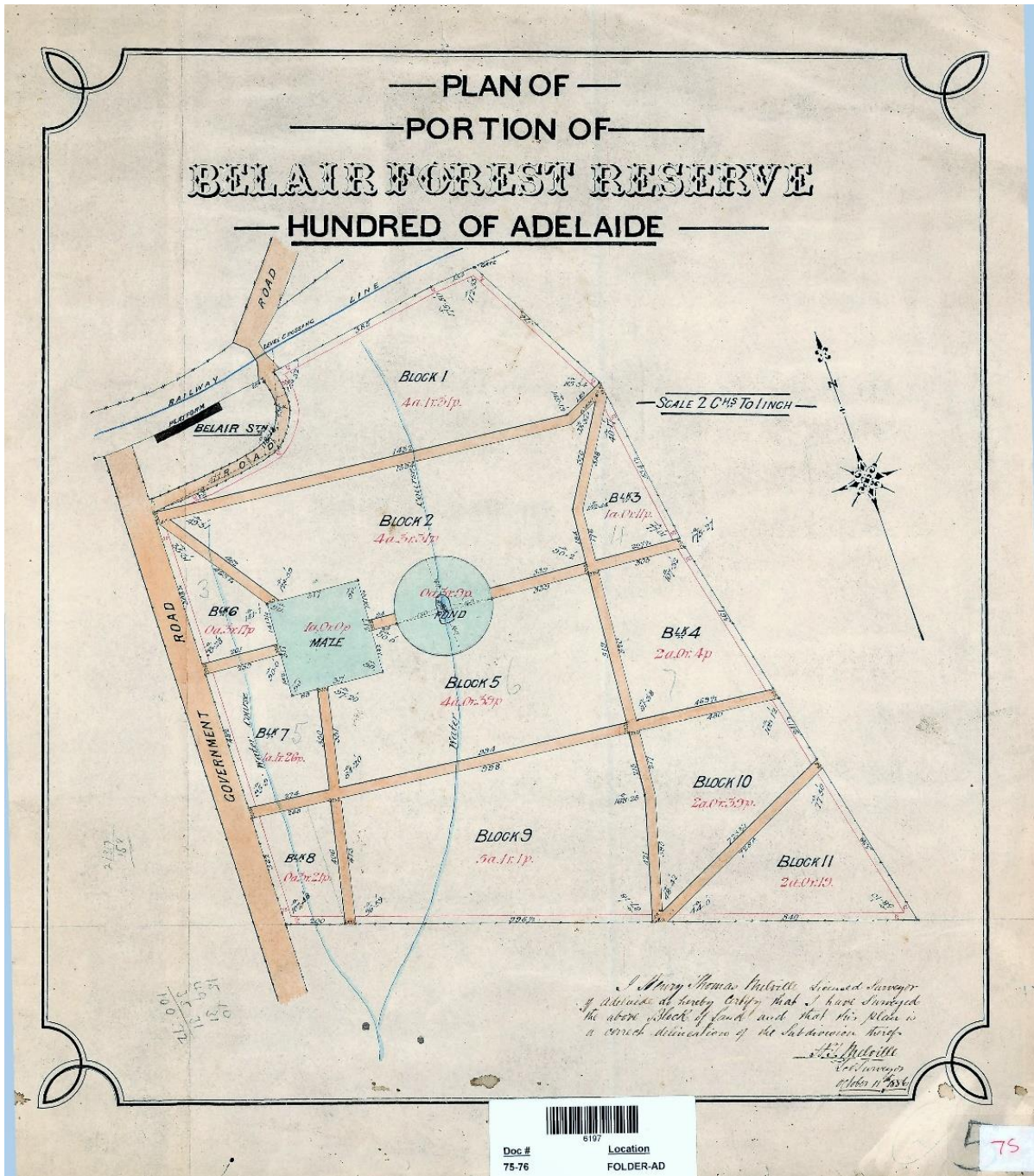
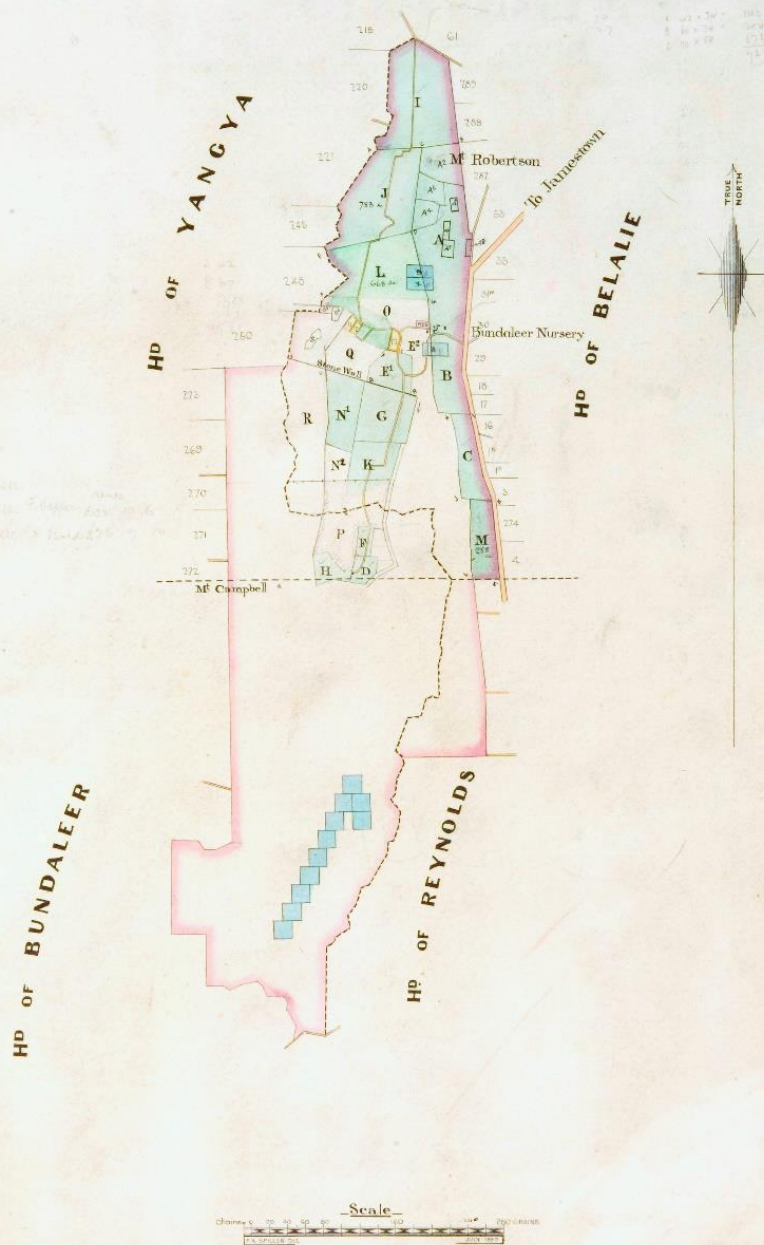


Figure 12: Portion of Belair Forest Reserve (1886). Note the detailed landscape design element including a hawthorn maze and pond. Source: PIRSA Forestry.

BUNDALEER FOREST RESERVE N^o 1

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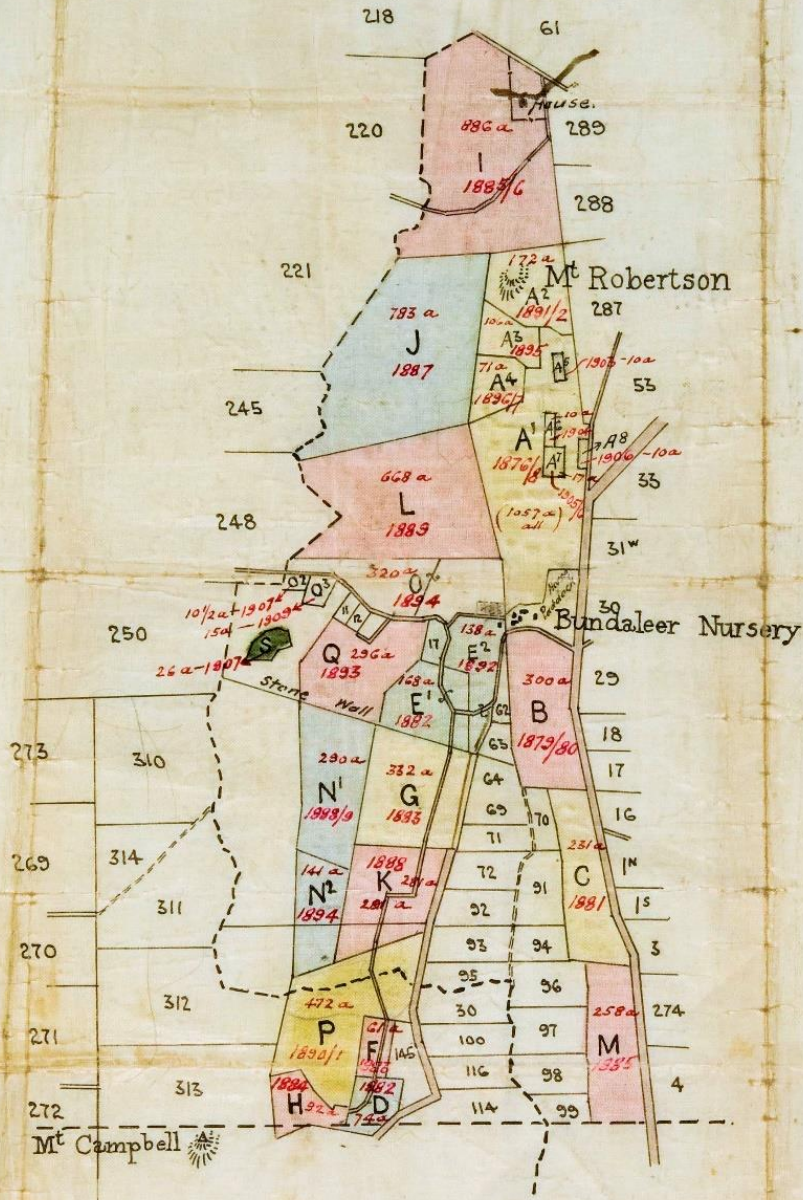


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Figure 13: Bundaleer Forest Reserve (c. 1880). Australia's first government forestry plantations were established here from 1876. Source: PIRSA Forestry.

Bundaleer Forest Reserve

*Showing Plantations and years when planted
in red figures.*



— *Scale.* —

— 80 CHAINS TO 1 INCH. —



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Location

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Figure 14: Bundaleer Forest Reserve (c. 1890). Note details including nursery, stone well and planting years. Small areas of the 1879 plantations (redgum and forest redgum) are extant. Source: PIRSA Forestry.

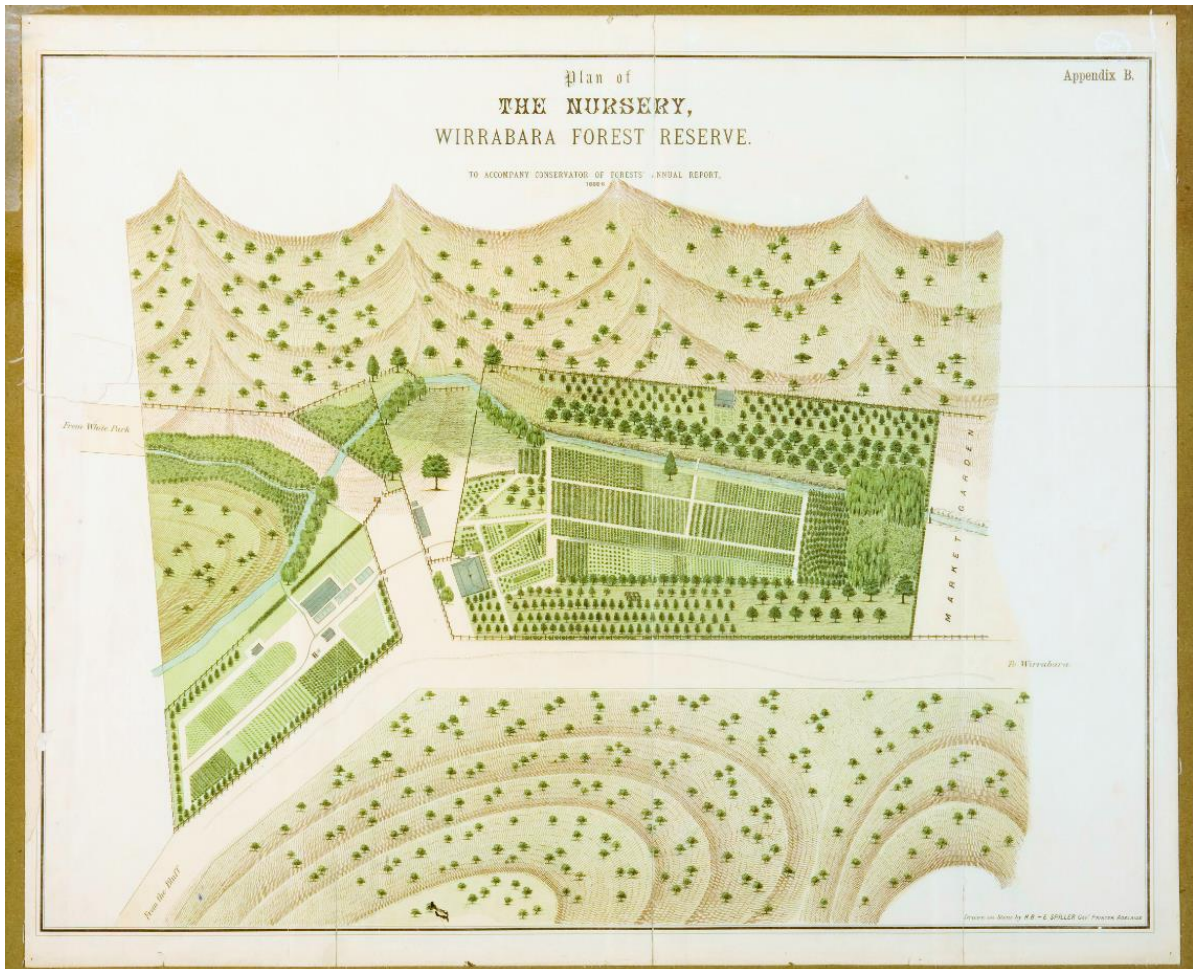


Figure 15: The Nursery at Wirrabara Forest Reserve (1886). A stylised plan of the Wirrabara Nursery. Great detail which operated from 1876 till 1925. Today it remains much loved for ruins and specimen trees. Source: PIRSA Forestry.

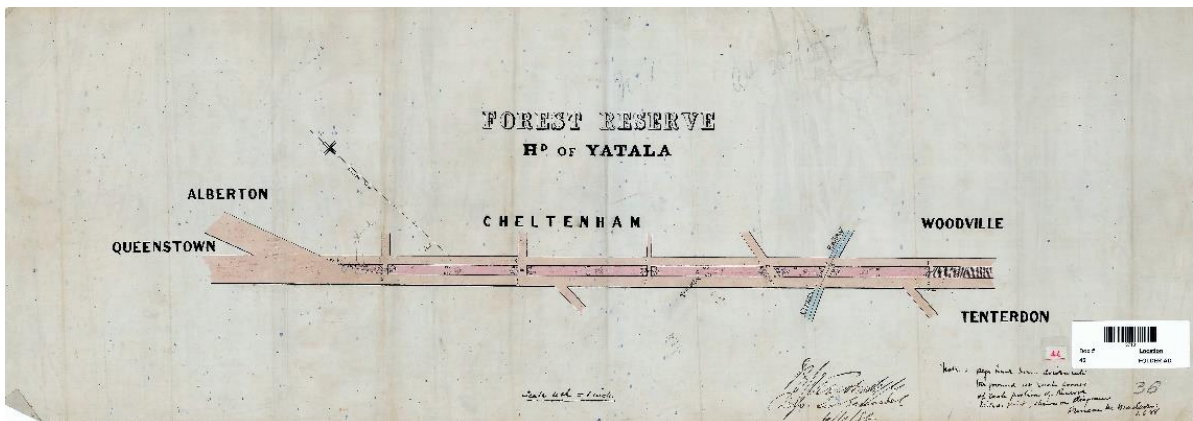


Figure 16: Port Road Forest Reserve (1888). Forest reserves were established in many places in South Australia for experimental but also aesthetic reasons. This is Port Road Forest Reserve along the road's median strip between Adelaide and Port Adelaide. The median is particularly wide as it was surveyed to be a canal of which only the start was ever built. Source: PIRSA Forestry.



Figure 17: Kapunda Reservoir (no date). The area contained a propagation nursery and experimental and aesthetic plantings. Most are extant.

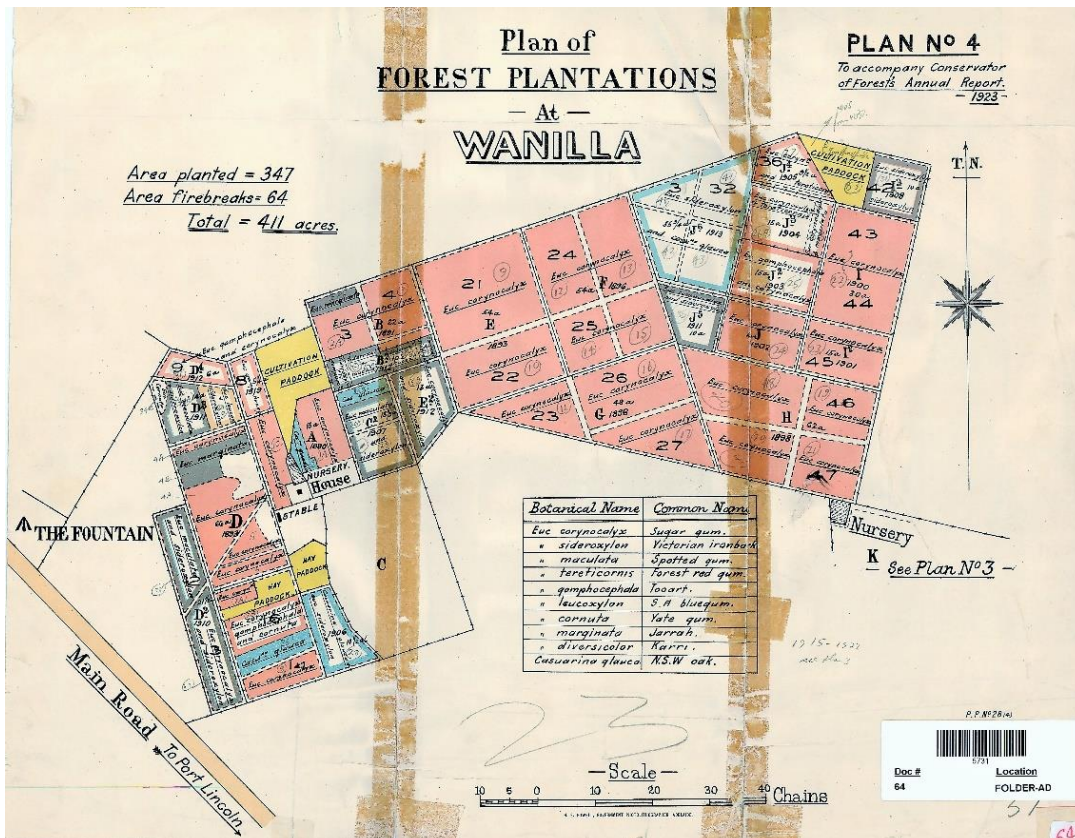


Figure 18: Wanilla Forest Reserve (1928). These experimental plantings were established on Eyre Peninsula near Port Lincoln. Source: PIRSA Forestry.

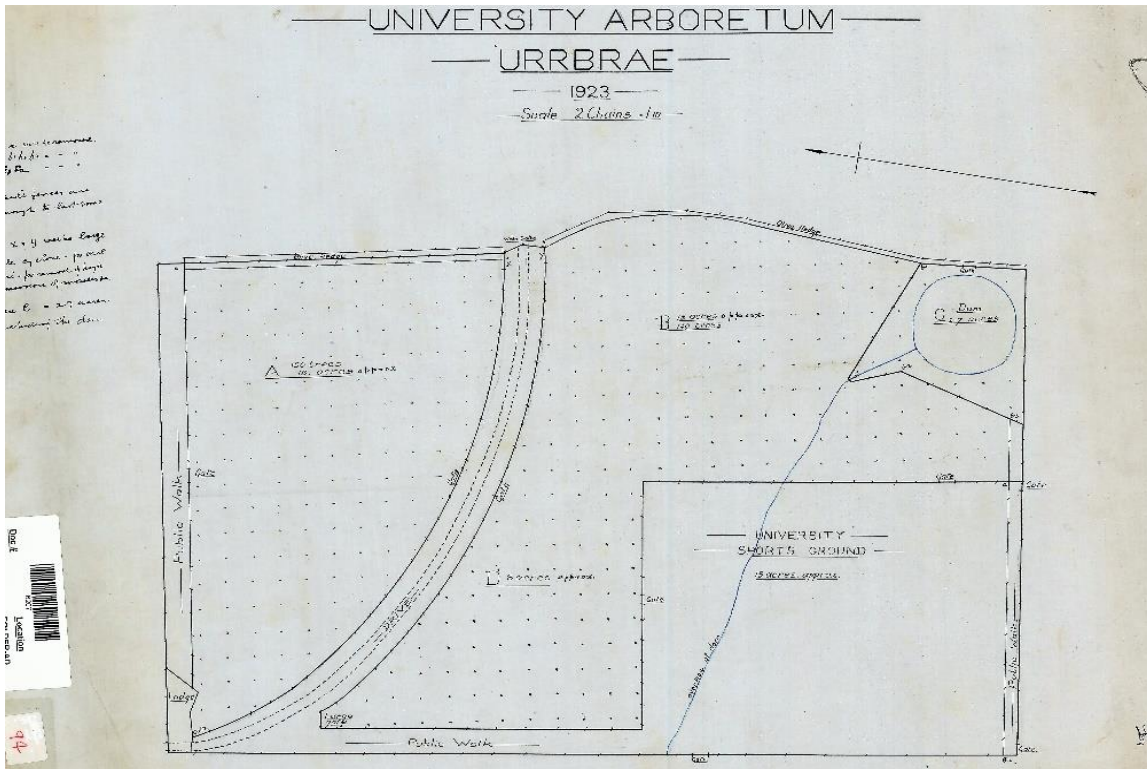


Figure 19: University Arboretum at Urrbrae. (1923). This shows the planned planting areas for the extensive collection of tree specimens now growing in suburban Adelaide. Note signature by Hugh Corbin from the University of Adelaide. *Source*: PIRSA Forestry. identified. The dots are likely notional.

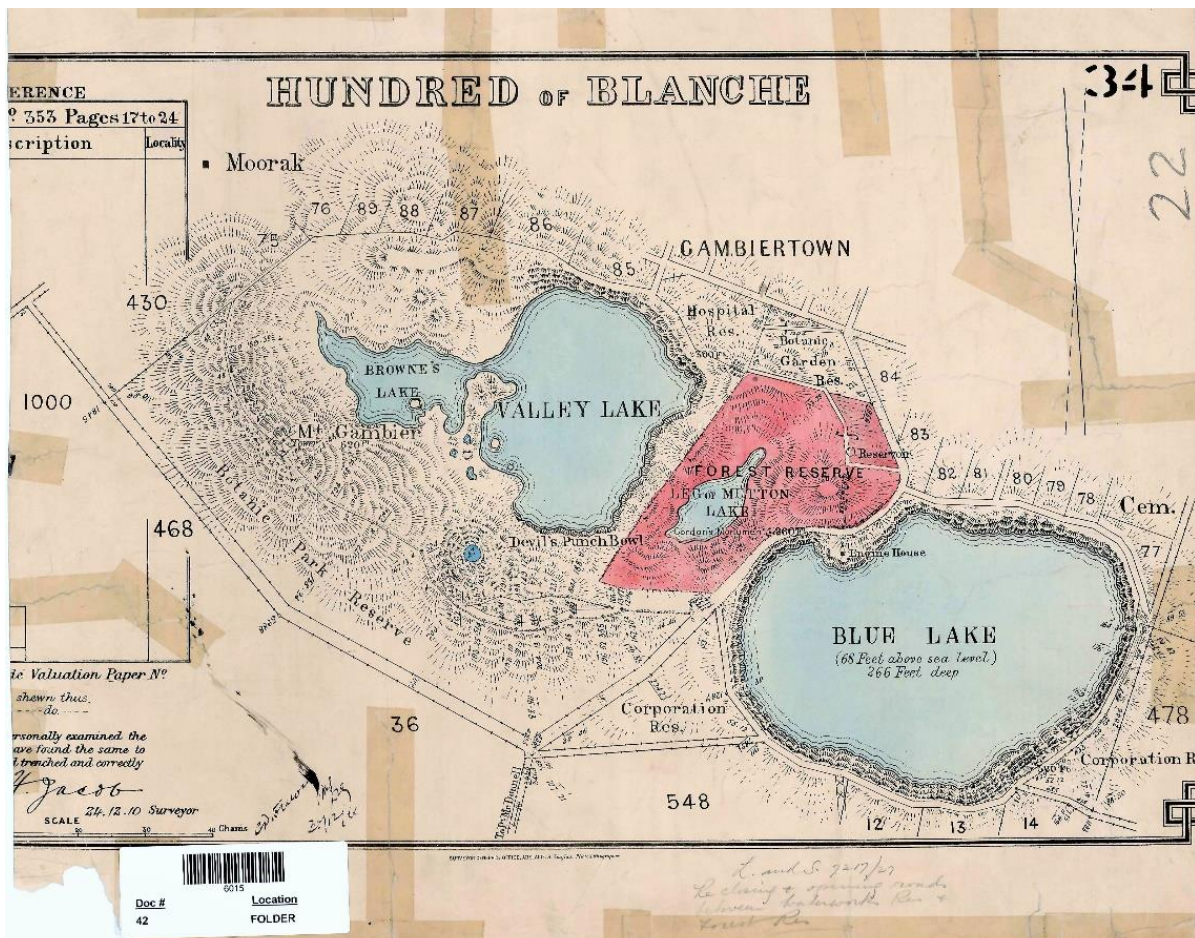
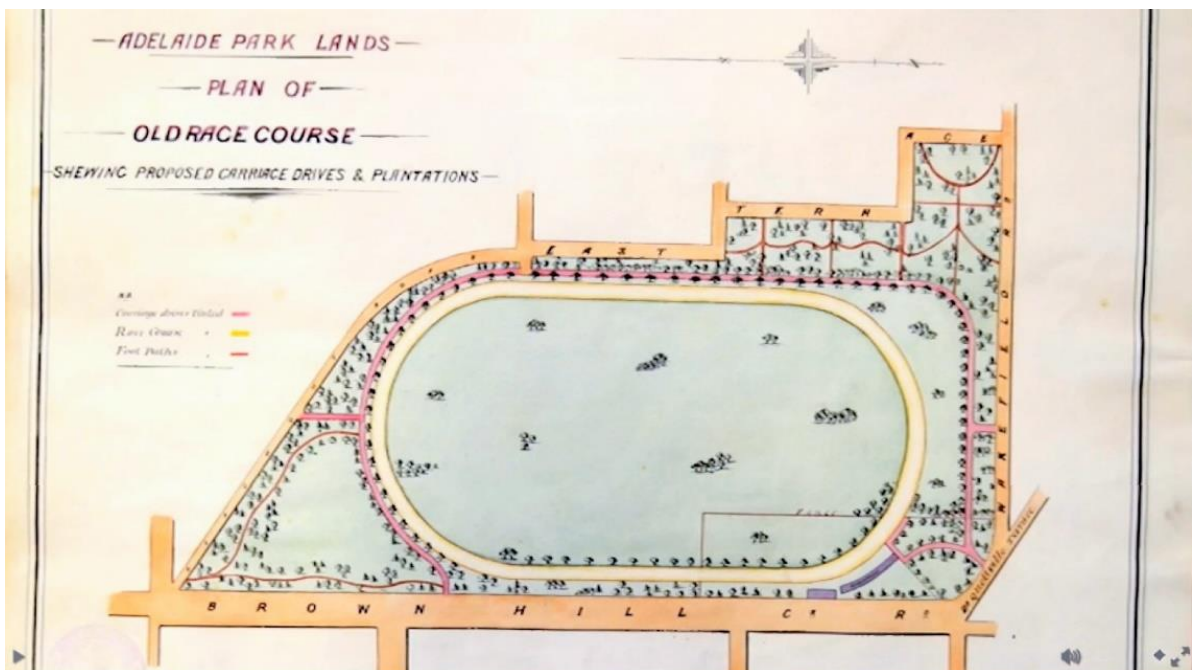
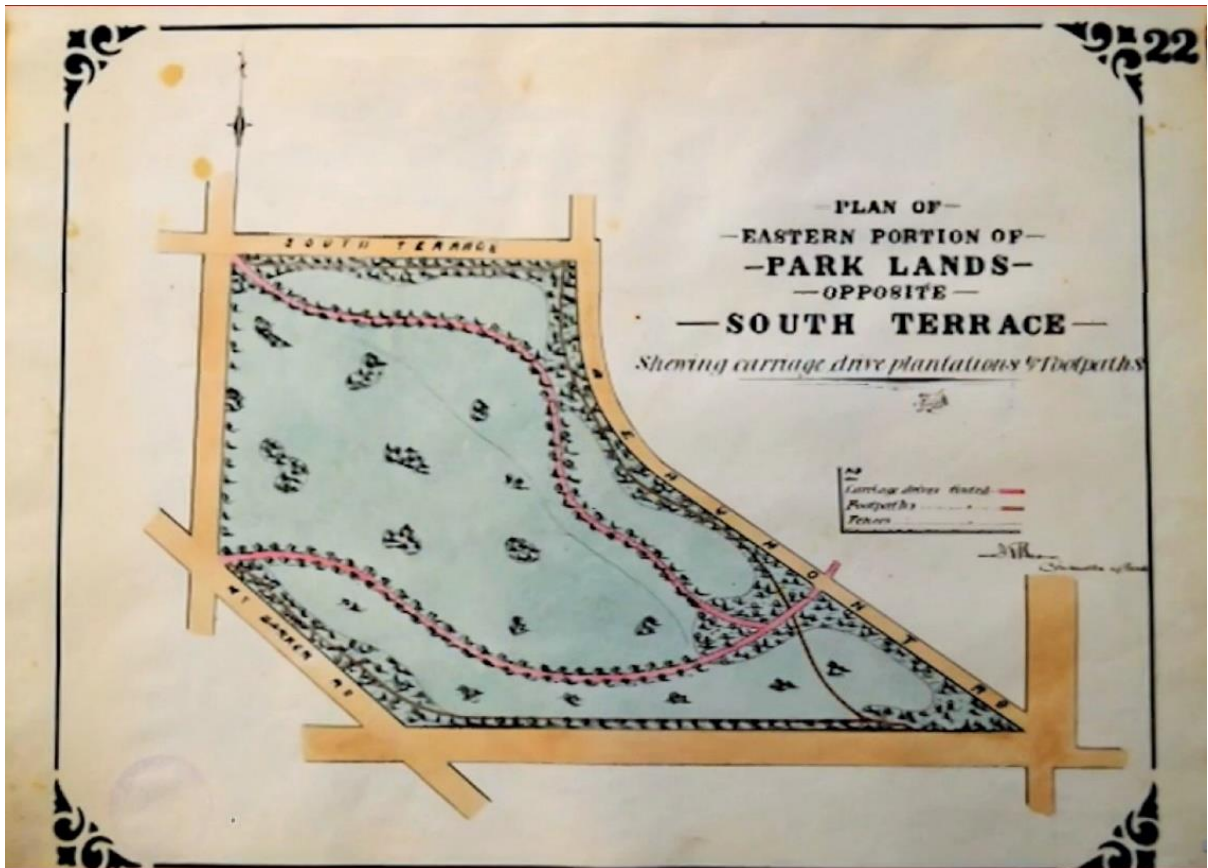


Figure 20: Mount Gambier Forest Reserve (1910). Although plantings commenced in 1877, it took till the early twentieth century to confirm the South East of South Australia would be ideally suited to the radiata pine. *Source*: PIRSA Forestry.



Figures 21 and 22: Adelaide Park Lands (c. 1883). The famous parklands surrounding Adelaide's CBD were planned for by the first Surveyor-General Colonel William Light. Light, however, left no details as to use or design for the parklands. Conservator of Forests JE Brown prepared design and planting plans. Much was implemented and evidence exists today. *Source:* PIRSA Forestry.

The many photographic images captured under Water Gill

Walter Gill was chief forester at Wirrabara from 1886 then promoted to Conservator from 1890 till 1920, succeeding JE Brown). Gill travelled widely and was a keen botanist and photographer. Many of his photos have been added to Departmental publications.

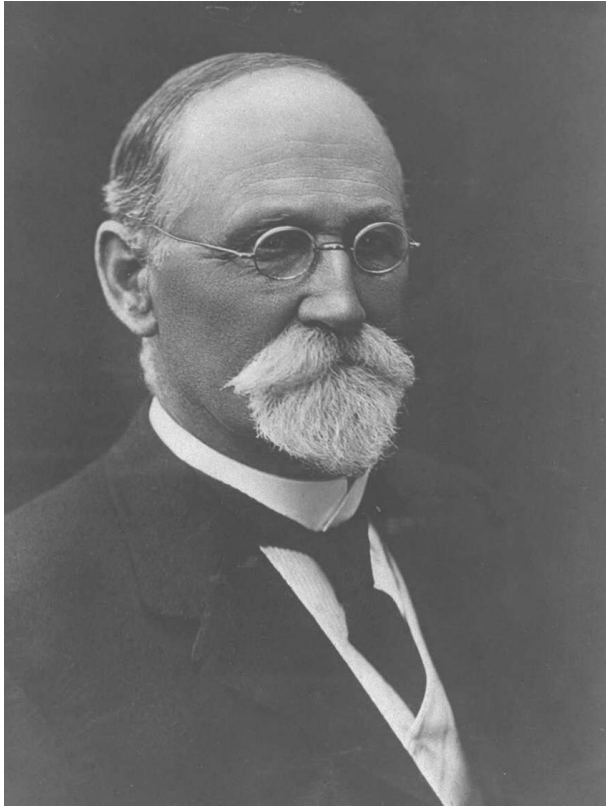


Figure 23: Water Gill, Conservator of Forests. Source: Unknown.



Figure 24: Opening of the Wirrabara Sawmill. (1903). The first commercial milling of radiata pine occurred once the first crop matured.



Figure 25: Sowing eucalypt seed into bamboo planting tubes at Bundaleer. (Date unknown). Source: PIRSA Forestry.



Figure 26: Date palms at Lake Harry on the Birdsville Track. (date unknown). *Source:* PIRSA Forestry.



Figure 27: Wattle bark stripping at Second Valley. (Date unknown). *Source:* PIRSA Forestry.

A successful experiment

By the early twentieth century, radiata pine had proven to be the most promising species and extensive plantings of pine were being undertaken in the Mid North and the Adelaide Hills. Large scale plantings commenced in the South East from 1907, although rates fluctuated until growth problems due to trace element deficiencies were solved by research in 1939. Radiata pine is now the mainstay of commercial forestry in South Australia.

It was not until 1930 was there sufficient radiata pine timber to construct a large-scale sawmill in the South East. Because private industry was not interested in purchasing or milling the wood, the state government established sawmills and the associated towns of Mount Burr in 1931 and Nangwarry in 1941.



Figure 28: Radiata pine house at the Royal Adelaide Show (1929). The Woods and Forests Department built this full sized house as a demonstration to overcome the resistance to utilisation of radiata pine in housing construction. *Source:* PIRSA Forestry.

References

Boardman, R., 'Living on the Edge – the Development of Silviculture in South Australian Pine Plantations', *Australian Forestry*, 51(3), 1987.

Lewis, N.B., *A Hundred Years of State Forestry*, Woods & Forests Department, Adelaide, 1975.

Robinson, R. & Johnston, P., 'Forestry in South Australia' in *The Wakefield Companion to South Australian History*, Wakefield Press, Adelaide, 2001.

Woods and Forests Department, *Annual Reports (1882–1992)*.