

## Reviews

Compiled by Peter Hobbins

Department of History, The University of Sydney, NSW 2006, Australia.

Email: [peter.hobbins@sydney.edu.au](mailto:peter.hobbins@sydney.edu.au)

**Edward Duyker:** *Dumont d'Urville: Explorer and Polymath*.  
Otago University Press:  
Dunedin, 2014. 664 pp., illus.,  
ISBN: 9781877578700 (HB), NZ\$70.00.

From the middle of the eighteenth century, maritime rivalry between the French and English was most clearly expressed in the discovery, mapping and colonisation of the Southern Hemisphere. By the 1840s the English had established numerous colonies in New Holland and New Zealand. Although the French toyed with establishing southern colonies, they missed opportunities to gain a toe-hold in New Holland and New Zealand in the crucial early decades of the nineteenth century.

Spanning 1822–40, the voyages of Jules Dumont d'Urville illustrate the closing of this window of opportunity. In his erudite and eminently readable book, *Dumont d'Urville: Explorer and Polymath*, Edward Duyker showcases the life and times of the French navigator. As in his previous biographies, on La Billardière and Péron, Duyker uses the genre to tell the stories of the French scientific voyages in which these naturalists participated. In his most ambitious book to date, Duyker follows d'Urville's event-filled life from his birth, a year after the onset of the French Revolution, until his death in 1842. Classically educated, the French explorer was not only a naturalist and linguist, but an accomplished navigator and veteran of three voyages to the Southern Hemisphere. Duyker's book is also a social history of the period, fleshing out in considerable detail the social and political context.

During his first naval posting in 1819, d'Urville brokered the deal by which France acquired the recently discovered Venus de Milo. In 1822, he was appointed second-in-command on *Coquille*. One of the tasks of this scientific

voyage was to reconnoitre the mouth of the Swan River for a possible French colony, although ultimately the expedition did not call there. During this expedition, d'Urville focused on his scientific interests: botanical collecting leavened with anthropological and philological observations.

Over 1826–29, *Coquille*—now renamed *Astrolabe*—carried d'Urville on his first voyage as commander. Revisiting New Holland and New Zealand, plus numerous Pacific islands, one of d'Urville's instructions was to scout for a suitable place for a penal colony in King George Sound (now Albany) or Western Port. He continued to pursue his scientific interests, together with the other naturalists, Quoy, Gaimard and Lesson. However, again French ambitions were thwarted: the English had already sent *HMS Fly* to prepare for settling King George Sound.

After sailing through the Pacific, d'Urville heard that the remains of the long-lost Lapérouse expedition had been discovered. D'Urville immediately set out for Vanikoro in the Solomon Islands; verifying the information, he erected a monument to Lapérouse on the shore.

In 1837, d'Urville left on his third voyage to the Southern Hemisphere in *Astrolabe*, with its consort, *Zélée*. Together with other scientists, the phrenologist Dumoutier also accompanied the expedition. As well as continuing his Pacific survey, d'Urville was instructed to explore the Antarctic regions. After the first visit to Antarctica, and en route to the second, the expedition put in at Raffles Bay on the Cobourg peninsula, sparking English suspicions that the French might want to establish a settlement in Northern Australia. On his second Antarctic visit, d'Urville discovered and named Adélie Land. In New Zealand, the expedition learned that the British had claimed the country, shortly before the arrival of French settlers for the projected settlement at Akaroa.

*Astrolabe* returned to Toulon in November 1840. Less than two years later, d'Urville—together with his wife and only surviving son—died in a terrible conflagration after their train to Versailles was derailed.

This book will appeal to the growing, generalist audience interested in early French exploration of New Holland. Academic readers will also find the work rewarding in many ways, while perhaps regretting that the biography genre does not allow more discussion of the work of the other scientists participating in each expedition. Duyker's well rounded and lively picture of d'Urville uses previously unknown documents, and quotes judiciously from d'Urville's diaries and other original sources. We read of his navigational expertise and assiduity in charting newly discovered regions; of his prowess in repeatedly avoiding shipwreck; of his botanising and insect-collecting; of his skilful negotiation with the peoples he encountered in the New Zealand and the Pacific, plus his study of their languages and cultures. Duyker's discussion of d'Urville's 'racism' is somewhat anachronistic as he fails to engage with the dynamic of emerging ideas of race during this period, as analysed by Bronwen Douglas and others. Another criticism concerns the correctness of the translations from the French. In a significant number of cases, one suspects that the translations in Duyker's text do not reflect the French accurately; it would have been helpful if the original had been given in the footnotes.

This large, handsome volume is richly illustrated and well produced. As an appendix, Duyker has also made a useful study of d'Urville's library, compiled from inventories and auction catalogues. Copious notes, a detailed bibliography and an excellent index complete the volume.

Duyker's book will be welcomed by all who are interested in early European discovery and settlement of the Pacific, Australia and New Zealand. Providing a fascinating portrait of d'Urville, the polymath, it sheds light on the mechanics of early French voyaging, and on the French contribution to the exploration and scientific observation of the Southern Hemisphere.

Margaret Sankey  
Department of French Studies  
University of Sydney

**David Hill:** *First Fleet Surgeon: the Voyage of Arthur Bowes Smyth*. National Library of Australia Publishing: Canberra, 2015. 224 + xi pp., illus., ISBN: 9780642278623 (PB), AUD\$44.99.

The First Fleet is a precious cultural memory for modern-day Australia. It was a monumental achievement in human endeavour: eleven tall ships that set out from Portsmouth, England, for a treacherous voyage to the other side of the world, to establish a colony in a foreign land. In recent literature little consideration has been given to the personal experiences of the surgeons who treated convicts, children and officers who travelled aboard these transport ships. David Hill's *First Fleet Surgeon: the Voyage of Arthur Bowes Smyth* provides such detail.

This book comprises an annotated personal diary of Bowes Smyth, putting his journey into pictorial context, by way of a magnificently presented layout composed of photographs of artefacts and the diary itself, which is held by the National Library of Australia. As mentioned in a recent interview with Hill, officers like Bowes Smyth often kept 'polite' entries in their diaries, so as to not offend their superiors. This account differs in offering a very personal and frank interpretation of the trials and tribulations faced by First Fleet officers and convicts alike.

Overall, this work serves as a pictorial accompaniment to the diary itself, and is suited to the non-academic, with a curiosity about what life for a late eighteenth-century surgeon at sea must have been like. The magnificent photographic presentation, with its inclusion of relevant contemporary art and lithographs of medical artefacts, takes the reader on a journey, so they feel as if they are travelling with Arthur Bowes Smyth. We start at Portsmouth, and are conveyed to Rio De Janerio, the Cape and then Sydney Cove.

The diary itself has been digitized, and is available for viewing online. One of the benefits of this book is that it saves the reader the trouble of deciphering the surgeon's difficult-to-read handwriting, which makes it a useful accompaniment to the original artefact. Hill's intention was to represent the facts as they were written in the diary, as closely as possible, and he does this with admirable clarity.

The professional historian will find that the historical context is at times rather clumsy, with a marked cherry-picking of anecdotal quotes to back up some misguided and contradictory generalisations about naval medicine and penology. For instance, Hill says that all naval surgeons were of a lowly standard, and then quotes William Redfern who wrote in an 1814 letter to Lachlan Macquarie that many 'ship's surgeons were ill qualified for the job, and that too many devoted themselves to inebriety'. While it is true that some naval medical officers had minimal training, some of the surgeons aboard the convict ships (and hulk establishments) had obtained an MD. In that sense, the training of the ships' surgeon was not so much inadequate, but inconsistent.

Indeed, the Royal Navy maintained strict standards with regard to medicine, and at times led the way with empirical trials of new therapies. These trials were often a response to running low on medicines, or encountering a new disease, where traditional therapeutics had failed. What proved detrimental to the work of the naval surgeon was not so much contemporary treatment standards, but their circumstances: cramped conditions, limited water, paucity of nutritious food, and the problem of keeping base ingredients for medical treatments fresh while at sea.

Recent research by medical historians such as Mark Harrison, Katherine Foxhall, James Bradley and myself have shown the willingness of naval doctors to experiment with novel medicaments, particularly when convicts were concerned. Hill provides little scholarly discussion of the therapeutics deployed to treat convict patients, offering instead only a generalised, presentist bias that all of the on-board therapies were inadequate and backward. Such a view, however, appeals to the general public, because it offers a comparison of 'then and now', evoking an excitement and drama that renders this book a page-turner.

Therefore, while very interesting, this book is not suited to the professional historian with a keen interest in medical history. Rather it is targeted at the general public, perhaps as a first history book; an appetizer (as it were) to expose the reader to the joys and excitement of reading a primary resource like a diary. Hill tries provide a context, in simple language, to help the reader understand some of the content of the diary,

and the background to the places visited by the fleet. Such an approach will successfully reach a very wide age-group and intellectual spectrum of readers. Writing history for the general public is not easy, and Hill does this well.

Angeline Brasier  
School of Historical and  
Philosophical Studies  
University of Melbourne

**Wilson McOrist:** *Shackleton's Heroes: the Epic Story of the Men Who Kept the Endurance Expedition Alive.*  
The Robson Press: London, 2015.  
362 + xviii pp., illus., ISBN:  
9781849548151 (HB), £20.

The 1914 British expedition to cross the Antarctic continent was the last roll of the dice in Ernest Shackleton's attempt to achieve immortality in the annals of exploration. After coming so agonisingly close to the South Pole in 1909, he had to relinquish that ambition following Amundsen and Scott's expeditions of 1911–12. When Wilhelm Filchner's 1912 *Deutschland* expedition failed to carry out a plan to cross the continent, Shackleton seized on this compensatory objective. In 1914 his party set sail on *Endurance* with the intention of landing on the Weddell Sea coast, and crossing the continent through the South Pole to the Ross Sea. Because of the prodigious distance—3000 km—a support party was sent to the Ross Sea to establish a line of resupply depots to sustain the party on its traverse.

The Ross Sea party comprised ten men, but the book focuses on the travails of the six who over the summer of 1915–16 sledged deep south, laying depots from McMurdo Sound across the Ross Ice Shelf to Mt Hope. Using these men's expedition diaries, McOrist aims to provide the reader with 'a truer picture of [sledging] life than would be allowed by the diary of one man'. To this end, much of the book comprises diary extracts that describe the daily life of the sledging parties.

The extracts frequently echo each other, which makes for somewhat repetitive reading, a characteristic that is amplified by McOrist's précis of the extracts that often precede them. And while the use of multiple diarists' entries about the same incident may present a 'truer picture' of the travails of the Mt Hope party,

in many respects the entries only confirm what readers familiar with Antarctic exploration literature already know—that Antarctic sledging was a daily agony that required immense physical and psychological stamina—and a share of luck.

No surprise then, that this trial was what the Mt Hope party also found. When the diaries offer a glimpse into the men's feelings and observations about their activities and predicaments, these too echo the observations and sentiments of many other Antarctic explorers of the era. None of this is to diminish the historical accomplishment of the Mt Hope party, but simply to point out that their experiences and observations were neither as unique nor individual as McOrist implies. The diaries forming the core of the book conform to the rules of the broader genre of personal Antarctic exploration writing, of which they are interesting but representative examples. As such they reflect prevailing outlooks, technologies and sensibilities about exploration, Antarctica, class, nationality and masculinity.

That McOrist is a 'qualified physicist, lawyer and entrepreneur', but not a historian, is evident. Undoubtedly passionate about the subject, he spent eight years researching the work with the overall objective of giving men that he 'idolised' the historical recognition that he feels is their due. However—and notwithstanding the book's supporting statements by Ranulph Fiennes and David Harrowfield—trained historians and well informed readers of Antarctic exploration literature are likely to find that while the book contains a lot of first-hand information it never moves towards a convincing historical assessment of the place of the Ross Sea party in the broader history of Antarctic exploration. An attempt to do so is made with the book's misleading subtitle, which should more accurately read 'the men who *might* have kept the *Endurance* expedition alive, had it not been crushed in the pack ice and been able to undertake the crossing.' Even if the *Endurance* party had set out, it is speculation to suggest that they would have reached and been saved by the supply depots laid by the book's protagonists.

*Shackleton's Heroes*, then, makes a contribution to our understanding of the Ross Sea party, but in a very old-fashioned way. McOrist's approach is unstintingly Anglocentric. His benchmarks are the early twentieth-century British expeditions—a period that he revealingly rebadges as 'the Scott-Shackleton exploration

era'—thereby casting aside the many outstanding contributions of expeditions by other nationalities. Given this bias, it is unsurprising that the overall conclusion of the book is similarly outmoded and subjective. McOrist claims that the protagonists were stalwarts fit to join the (British) Antarctic Pantheon of the 'Heroic Age'.

While earlier generations often wrote about Antarctic exploration as the achievement of heroes, mature contemporary Antarctic historical scholarship critiques the hero-centric paradigm as fundamentally unhistorical, anachronistic and subjective. After all, one person's Antarctic hero can also be another's self-serving twit, social misfit, or bungling incompetent. On Shackleton's recommendation four of the book's protagonists were awarded the Albert Medal, but not the more prestigious Polar Medal awarded to the *Endurance* party. This suggests that in spite of the book's title the men of the Mt Hope party are primarily McOrist's, not Shackleton's, heroes.

Ben Maddison  
School of Humanities and Social Inquiry  
University of Wollongong

**Janis Sheldrick:** *Nature's Line:*

*George Goyder: Surveyor, Environmentalist, Visionary.* Wakefield Press:

Adelaide, 2013. 458 + xiv pp., illus.,

ISBN: 9781862548251 (HB), AUD\$45.00.

George Goyder was Surveyor-General of South Australia for an impressive 35 years—just over half of that state's colonial history—at a time when the position involved practically everything to do with the land and its use. Appointed over 1860–94, his role encompassed not just exploration, survey and settlement, but also mineral exploration and mining, drainage, forestry, infrastructure and town planning. Janis Sheldrick's account of Goyder's life is extensively, even exhaustively, researched, and almost overwhelming detailed. It is nevertheless clearly written and in places quite lyrical—especially in describing the South Australian landscape. While the work is firmly connected to its localities, the sheer number of place names may bewilder interstate readers. Most importantly, it lucidly explains the scientific and intellectual milieu of its protagonist, demonstrating just how insightful and revolutionary his thinking on the climate and environment was at that time.

Although the author's focus remains fairly closely on her biographical subject, Goyder's many different fields of work and interest mean the narrative also covers several areas of mid- to late-nineteenth-century science and thought. The book is divided into four roughly chronological parts. Part I introduces Goyder through his family background, before covering his move to South Australia, entry into public service, and extensive travels and activities in developing his 'line of reliable rainfall' from the late 1850s to the mid-1860s. Part II returns slightly to the earlier years of Goyder's surveyor generalship, describing his work as mines inspector during the copper boom, including his entanglement in a few major disputes, and his surveying of the site of Darwin (1868). Part III describes the tumultuous years of the 1870s, when pressure for agricultural expansion led the government to abandon Goyder's line and recommendations, only for him to be vindicated during the drought of the early 1880s. This section also covers some of Goyder's many other areas of interest, such as forestry, draining wetlands and artesian water. Part IV brings Goyder's life and work towards a conclusion, surveying his final years of employment and eventual retirement, and reviewing his role in terms of public service and environmental thinking.

One of the recurring themes is Goyder's line itself, and what exactly it depicted. The author is at pains both to explain this and the significance of Goyder's realisation in relation to intellectual thought of the day. For the record, the line did not just equate to average annual rainfall, but to the limit of rainfall reliable enough over the long-term to enable agriculture as a going concern. One of the key concerns of historical biography is to avoid an anachronistic projection of modern thought and sensibilities onto historical subjects, and instead to show how different were the societies and philosophies of the past. In explaining Goyder's thoughts and conclusions, therefore—plus several other theories of the day, such as 'the rain follows the plough' or 'tree theory'—Sheldrick makes an important contribution to our understanding of nineteenth-century natural science.

This is also an impressive volume physically. The publishers have generously allowed for high-quality production, with hard cover and extensive illustrations (both black-and-white

and a section of colour plates). They have even provided generous space for endnotes, although I suspect that these have nevertheless been somewhat condensed. For a book as much about ideas as people and places, a more extensively thematic index might have helped academic readers especially. These are of course relatively minor quibbles.

One of the great promises of this work is that, despite its very thorough coverage of Goyder's work, still it appears to have barely scratched the surface in terms of mining the sources available. In describing Goyder's many activities, Sheldrick most often cites and quotes his official reports to parliament, yet some comments and endnotes hint at an even greater wealth of information in his (and his underlings') many field books, and in the more mundane in-house records of his department. As with the similarly extensive records of the other states' colonial Lands Departments, these archives still await local historians, historical geographers and climatologists, while Sheldrick's monumental biography of this one department head admirably puts them all in their historical, intellectual and political context.

James Drown  
Department of History  
University of Sydney

**Alastair Stewart:** *Somersaults in the Sand: Adventures in the Geological Mapping of Australia*. Halstead Press: Sydney, 2014. 152 pp., illus., ISBN: 9781925043037 (PB), AUD\$29.95.

The pleasure of working in the field (as well as in puzzling the 'big picture') while interpreting the Earth's structure has drawn many students to geology. So it was for Alistair Stewart, who completed a BSc at the University of Melbourne in 1961. Thereafter, as Stewart acknowledges, he was one of the 'lucky few' who could sustain lengthy field trips and avoid becoming a desk-bound geoscientist. The author's career was, clearly, a labour of love.

Stewart joined the Bureau of Mineral Resources, Geology and Geophysics (BMR) in 1962. He worked in a more civilised era of exploration when 4-wheel drive vehicles, camping equipment, food and communications had

ameliorated many of the privations experienced by Australia's pioneering geologists. This is not to say that post-war field trips in remote regions have been easy—the huge distances, harsh terrain, lack of people, and juggling individual idiosyncrasies within teamwork remain some of the constants. Stewart covers these aspects well, alongside the role of crew members, kitting out the party and how field trips were organised.

The book is perhaps best read from the end first. To better appreciate the main text, one might commence with 'Last thoughts' (Chapter 12), 'How and why field geologists do their work' (Appendix 1), the dates when the fieldwork and office work for the map preparation were done (Appendix 2) and even the glossary of technical, scientific and general terms. All are most valuable and assist the reader's understanding of the text—for example, the nature of traverse work requires explanation for the uninitiated.

As a personal account, this book barely mentions the parallel between the work undertaken by state and territory-based geological surveys, and private organisations and universities. Some of its material has appeared previously in the newsletter of the Earth Sciences History Group of the Geological Society of Australia. This fuller memoir is an anecdotal account of the author's work career; there are few family or personal details to provide perspective on his background. There is little, for example, on what he learnt as a novice joining the BMR, who taught him, or the formal and tacit transmission of knowledge. Strangely, his decision to undertake a PhD—and its outcome—remain unexplained.

Given the focus on Stewart's field trips, the daily work undertaken when desk-bound is ignored. What about the meetings, the office colleagues, incorporating data from aerial surveying, liaison with the drafting people to generate his maps, and the interpretation that followed mapping? It is a pity that the opportunity to elaborate upon the outcome of fieldwork in greater detail was not pursued.

A detailed analysis of the art of map preparation from data collection through to publication was not the book's purpose, but there are some insights into the process. However, in a book on mapping it was surprising to see so few maps, and more could have been made of the six locality maps. The source of the photographs

is also unclear. A few more of the author would have been appropriate without being indulgent, in order to convey a physical presence of Stewart and his work.

The subtitle is somewhat misleading: Stewart was predominantly mapping the hard rocks of remote central Australian regions, rather than the whole continent. Although the chapter titles include the years for field trips, including dates or months in the text would have benefited the storyline at times, even if just to indicate seasonal weather.

Despite my quibbles, *Somersaults in the Sand* is a readable and informative account that, in its 140 pages, demonstrates the author's joy with his work and good fortune in maintaining a career in the field. Significant changes to the geoscientists' working life in the past three decades have resulted from the impact of the computer age. While the 'bells and whistles' of modern search techniques are in themselves brilliant and fascinating advances in exploring the Earth's structure, pulling on a pair of boots and traversing the country remains fundamental to the geosciences.

Bernard O'Neil  
Department of History  
University of Adelaide

**Matthew J. Colloff:** *Flooded Forest and Desert Creek: Ecology and History of the River Red Gum.*

CSIRO Publishing: Collingwood, 2014.  
344 pp., illus., ISBN: 9780643109193 (HB),  
AUD\$69.95.

*Flooded Forest and Desert Creek* is a dynamic book, written from the heart, that delivers a thorough biography of *Eucalyptus camaldulensis*, a widely distributed eucalypt species known to most Australians as the river red gum. Matthew Colloff, a Principal Research Scientist with the CSIRO's Land and Water Flagship, provides a text that is delightfully different from most of its type.

Divided into three parts, this book delivers an in-depth analysis of the river red gum through climatic, ecological, economic, sociological, spiritual, political and historical frameworks. Utilising this interdisciplinary approach, Colloff analyses the tree's connection with people and its iconic status in Australian society, as well as its characteristics, habitat and

evolutionary history. This is a refreshing take in a field dominated by conservation management plans, detailed habitat descriptions and physiological characterisations. Drawing upon a diverse range of scientific, literary and artistic sources—including geomorphological data, the journals of eighteenth- and nineteenth-century explorers, oral histories and artworks—Colloff provides a detailed exposition of this iconic tree.

Choosing not to discuss use of the river red gum as a plantation timber or garden plant, the author focuses on areas aligned with his background in ecological science, plus the tree's social and cultural place. Part One, 'The Unfolding Forest', contextualises its emergence, outlining how Australia's climatic conditions affected the evolution and dispersal of the species. Commencing six million years ago, with a focus on central and south-eastern Australia, Colloff provides a detailed and informative outline of the fluctuating climatic conditions that shaped this continent. Tracing the evolution of the seven *E. camaldulensis* subspecies, helpful diagrams and images depict their morphology, embellishing descriptions of the trees' dramatic size, growth patterns, longevity, reproduction traits and association with fresh-water habitats.

In the book's second part, 'Forces of Change', Colloff focuses on factors that caused (and in most cases still cause) dramatic changes to the Australian landscape through the nineteenth and twentieth centuries. He posits a fire-stick-farming theory worthy of attention, whilst emphasising the importance of natural flooding to river red gum growth and reproduction. The role of inundation on its survival has been previously investigated in such texts as Nick Wilson's *The Flooded Gum Trees* (1995). However, Colloff's discussion of the subject is fresh, dynamic and interesting, emphasising that the future of this species—and all relying upon it for shelter and nourishment—depends upon sustainable water regulation practices.

In the context of livestock farming and timber harvesting, Colloff's points concerning historic landscapes and colonial settlement are both challenging and fascinating. Changes to the landscape since 1788 are investigated in relation to the impact they have had on river red gum forest, including land management practices, including logging, grazing, introduction of

non-native flora, watercourse manipulation and displacement of Aboriginal people.

The book's progressive third part, 'From Exploitation to Conservation and Multiple Values', examines the role of river red gum trees in literature, film and art. Colloff also investigates their use as a symbol and their place as an Australian icon. He questions what the trees represent to people in different parts of the country and why there seems to be a shared sense of connection with—and reverence for—this species. Analysing the ability of river red gums to 'connect people, places and time', Colloff enlists theories surrounding environmental consciousness, emotional connections to country, and the importance of conservation and heritage to the public. He also highlights interesting urban projects urging re-connection with local environments through the utilisation of these gums—or depictions thereof.

The final part of the book explores conservation. Difficulties between locals and 'resource exploiters' are discussed along with relevant government inquiries, and interesting facts on the history of river red gum conservation are presented alongside the author's suggestion that the species' survival lies in understanding and acknowledging its fundamental characteristics.

Despite outlining numerous contemporary threats to the river red gum, this book's strength lies in its unfailingly hopeful attitude, providing readers with a context through which they can better appreciate the endurance of this mighty gum and assist with its conservation and re-establishment. The river red gum, Colloff writes, 'stands for life, endurance and persistence' and the reader is left with the feeling that hope remains for this amazing species. A downside of the book may be its size. This is no light bedside read, but rather a comprehensive homage to a tree which, Colloff argues, 'has played a central role in the tension between economy, society and environment—perhaps more so than any other Australian plant or animal.' However, given that *Flooded Forest and Dessert Creek* could be considered the new definitive text on this species, its size is more than excusable and in no way detracts from its readability.

Rebecca Anderson  
Sydney Quarantine Station

**Douglas Parbery:** *Daniel McAlpine and the Bitter Pit*. Springer: London, 2015. 252 + xxi pp., illus., ISBN: 9783319095523 (HB), €139.99.

Douglas Parbery writes the biography of Daniel McAlpine as an insider: a retired mycologist detailing the life of a fellow mycologist. There was, however, far more to McAlpine's career than mycology. In line with the broader applications of scientific knowledge across his lifetime (1849–1932), McAlpine worked as a plant pathologist, lecturer in the school of pharmacy, and advisor on disease to agriculturalists and orchardists.

The author's aim is to bring McAlpine out of obscurity and to celebrate his influential research into bitter pit, a destructive disorder causing blemishes and a bitter taste in pome fruits such as apples and pears. At the time of McAlpine's investigations—through the 1910s—Australian orchardists were losing up to 50 per cent of their crops to bitter pit. In states like Victoria and South Australia, which had invested heavily in irrigation infrastructure, research was critical for successful export outcomes.

Parbery divides the book into three sections. The first outlines McAlpine's early life in Scotland and England, focusing on his education, publication of teaching materials and his emigration to Australia. These were the building blocks that created a pathway to his appointment as vegetable pathologist to the Victorian government in 1890—a position McAlpine held for over 21 years. Part two focuses on the bitter pit investigation, funded as a joint Commonwealth-State venture between 1912 and 1917. Parbery describes the year-to-year research program, weaving it together with the political intrigues that were entangled with the research. McAlpine is set as a rival to Alfred Ewart, professor of botany at the University of Melbourne. Ewart is drawn as a conniving and ruthless character, who sought to undermine McAlpine's reputation and ruin his career. This ruination takes its shape in a forced retirement at the end of his investigations.

The book concludes by setting McAlpine's research success against his failure to play the political game. With the cause of the disease unknown, McAlpine had cast widely into many different fields to speculate how these strange deformities grew, in order to eliminate various

contenders. In an effort to assist orchardists, his studies encompassed chemistry, poisons, hydration, vascular systems, growth rates and storage temperatures. While attempting to find a cause, he also worked on solutions for the industry, especially in the maintenance of stable temperatures for transport of fruit. The cause of bitter pit eluded him in the end, and even now is uncertain, although it is believed to be induced by a deficiency of calcium during fruit maturation. McAlpine's inability to pin down a direct cause was articulated as the reason that his career ended with the bitter pit investigation.

Writing to reclaim a place for McAlpine in the history of Australian science, Parbery's indignation stems from interactions with his subject's relatives. Many remembered McAlpine's final years of life as filled with resentment after he was barred from returning to his government position at the completion of the bitter pit research. The author secured records from an archival clean-up that provided correspondence about the personal politics of this research programme. The destructive rivalry germinated from different hypotheses about the cause of bitter pit—a familiar refrain in the history of science. Parbery differentiates McAlpine's case by claiming that Ewart interfered with the bitter pit investigation by influencing the members of the oversight committee, poisoning McAlpine's ongoing position as vegetable pathologist.

Undoubtedly, this book enhances our understanding of the politics of research in early twentieth-century applied science. The text is strongest in its translation of scientific studies for a non-scientific audience. It explains the problem of bitter pit and nicely contextualizes it within the varieties of contemporaneous research. However, the lack of historiographical contextualisation means that the biography is very narrowly focused. Parbery also labours McAlpine's story and the technical tale of his investigations, leaving the work repetitive and cluttered with too much extraneous material. Moreover, Parbery is remiss in downplaying two important points in the retelling of this scientist's life. First, by the time the bitter pit investigations were concluded, McAlpine was nearly 70 years old, and certainly ripe for retirement. Second, Australian governments—both Commonwealth and State—were dealing with World War I and the financial constraints it imposed on civilian



projects. There may not have been the money to offer McAlpine his position back.

In spite of an ignoble end to his career, Daniel McAlpine's work is honoured in an annual memorial lecture, an outstanding achievement award, a medal and now a monograph about his life's work. Forgive me for wondering how on earth Parbery came to the conclusion that McAlpine's reputation was in need of rehabilitation! This mycologist was not in danger of being forgotten.

Jodi Frawley  
Creative Industries Faculty  
Queensland Institute of Technology

**Warwick Anderson and Ian R. Mackay:**

*Intolerant Bodies: a Short History of Autoimmunity.* Johns Hopkins University Press: Baltimore, 2014, 241 + xiv pp., ISBN: 9781421415338 (PB), USD\$25.95.

The title might seem to belong more to Hollywood than an academic bookshelf, but readers may rest assured that *Intolerant Bodies* is no product of a fevered imagination. Written by veteran immunologist Ian MacKay and renowned historian of medicine Warwick Anderson, this book packs in serious scholarship in both science and its history, adding hefty amounts of philosophy for good measure. The main subject under focus is autoimmunity, 'a biological phenomenon literally inconceivable until the twentieth century,' as historian Charles Rosenberg notes in his foreword.

Nowadays, autoimmunity is understood by mainstream medical professionals as a mechanism whereby an individual's immune system attacks cells, tissues and organs of the very body it normally protects. This inversion generates a host of seemingly disparate ailments depending upon the specific target attacked. Many conditions now classified as autoimmune diseases have been known for centuries, but only with the maturing of immunology as a discipline in the twentieth century were they understood in terms of a common underlying mechanism. Using the histories of four such diseases—multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis and type I (juvenile) diabetes—Anderson and MacKay have constructed a

narrative of how autoimmunity developed as a 'concept of pathogenesis', and came to be framed as a disease condition.

Readers plunging into the first chapter of *Intolerant Bodies* without reading the introduction might be forgiven for thinking that this book is about fever rather than autoimmunity. But the authors make a valid case for beginning in this territory: in the nineteenth century, 'theories of fevers anticipated the idea of autoimmunity'. The second chapter tracks the early history of immunology as a discipline, with special emphasis on situating it within the context of identity and individuality, a dominant theme through the remainder of the book. The authors then home in on the development of the concept of autoimmunity, tracing how different diseases came to be regarded as consequences of immune system dysfunction.

Inevitably, in a book tracing immunological ideas, and moreover, one written by Australians, Frank Macfarlane Burnet is given his due homage. Chapter 4, entitled 'The Science of Self,' traces the way Burnet came to conceptualize the idea of immunological selfhood and further examines the profound impact of this concept on immunology since then. In perhaps the most compelling chapter in terms of understanding what it means for individuals to cope with autoimmune disease, 'Doing Biographical Work' (Chapter 5) draws upon MacKay's extensive experience treating patients. The last chapter returns from the clinical to conceptual, detailing how the immune self has undergone transformations since Burnet first introduced the idea. As the authors put it, 'Late-twentieth-century immunology could be arcane and strangely fractious, but on a practical level everything was coming together'.

The afterword ties together the book's various themes, but works just as well as a stand-alone essay—save for its final words. The ending quotes a patient to remind the reader of the authors' grander purpose in writing: 'making our marks on paper, puzzling over the past and the present doings of our species, pursuing our peculiar passion for talking with strangers'.

Readers be warned: although *Intolerant Bodies* lives up to its promise as a 'short' history of autoimmunity, its size—154 text pages and nearly 100 pages of additional notes and peripherals—belies its density, complexity and

range. This book is not for novices unschooled in either history or some immunology. Neither does that seem to have been the authors' intent, for in their acknowledgements they identify as 'our ideal readers and interlocutors' their own mentors in their respective fields—medical historian Barbara Gutmann Rosenkrantz and the Australian medical scientist, Ian Jeffreys Wood. Exalted company indeed for the strangers with whom Anderson and MacKay have pursued their peculiar passion!

Neeraja Sankaran  
History of Science  
Ashoka University

**Juliet Flesch:** *Transforming Biology: a History of the Department of Biochemistry and Molecular Biology at the University of Melbourne*. The Miegunyah Press: Carlton, 2015. 333 + xvii pp., illus., ISBN: 9780522867701 (HB), AUD\$59.99.

*Transforming Biology* follows both the intellectual and institutional development of an emerging academic department, documenting its contributions to the Australian life sciences throughout the second half of the twentieth century and into the present.

Starting from the development of biochemistry and molecular biology within Melbourne University's School of Medicine and its Department of Physiology, Juliet Flesch opens with the inchoate years of 'physiological chemistry' during the early twentieth century. The narrative, nevertheless, focuses on the period after a dedicated Department of Biochemistry was established in 1938. Documenting developments over the subsequent seven decades, Flesch draws together the experiences of the many people who researched, taught, learned and worked at what was later renamed the Department of Biochemistry and Molecular Biology. Like her previous contributions to the history of the life sciences at the University of Melbourne (*Minding the Shop* 2005, *Life's Logic* 2012), *Transforming Biology* is a colourful contribution to a growing project of institutional memory.

In line with her prior work, Flesch has been particularly attentive to the often-observed voices of women in Australian science. Although I found the chapter 'Trailblazing Women' to be quite short, it appears very early in the book.

As I read on, I realised that it was not merely a token 'women's chapter', dispensed with early in the text in order to proceed to the 'more important' men's business. Instead, this chapter pays homage to the contributions of women during a time when they were grossly underrepresented in professional science. Moreover, throughout the remainder of the text, Flesch incorporates the stories of women in a way that never feels as if it were some kind of box-ticking, or serving a particular agenda. Indeed, this book is made appealing by the author's ability to build a clear and accurate picture of the department without too much critical meddling.

The first six chapters were the most apposite to me as a historian of the life sciences, and I found Flesch's biographical sketching of significant people to be quite engaging. The financial and intellectual contributions of the department's two great patrons, Russell Grimwade and Victor Trikojus (Professor of Biochemistry, 1943–68), are discussed at length. Their presence also provides some continuity throughout such a quickly paced book. However, Flesch's desire to include as many people as possible meant that the later sections became a little encyclopaedic; often there was no real sense of these people beyond a name and the years they served in the department. Of course, one advantage in including all of these individuals is that the sheer number of publications referenced—coupled with an appendix of doctoral dissertations—support Flesch's assertions that the department has been influential on a global scale.

The text is peppered with photos drawn both from the University of Melbourne Archives and the personal collections of those associated with the Department of Biochemistry and Molecular Biology. These photographs anchor the many people who are represented within the text, and add to its value for the department itself. In a way, the chapters covering later years read almost like an extended newsletter, full of anecdotes and recent achievements. Although this is not always an approach I find particularly interesting, Flesch's rapport with the members of the department is clear, and her warmth is engaging. In the material gained from her own conversations, one can see how institutional histories are often made a success only through a meaningful collaboration between the historian and her subjects.

The writing throughout *Transforming Biology* is beautifully clear, and I can imagine it will be treasured by those associated with the department as a significant contribution to institutional memory. While the early chapters will be of most interest to historians, a comprehensive account of publications, doctoral dissertations and scientific developments will interest those across the field of biochemistry.

Samantha Killmore  
Department of History  
University of Sydney

**Craig Cormick (ed.):** *Ned Kelly Under the Microscope: Solving the Forensic Mystery of Ned Kelly's Remains.*

CSIRO Publishing: Collingwood, 2014.

263 + xxvii pp., illus.,

ISBN: 9781486301768 (PB), AUD\$39.95.

The media is somewhat obsessed with death, portraying its investigation in half-baked and romantic shows such as *Bones* and *CSI*. Contrasting with this genre, the discovery in 2009 of the possible bones of Ned Kelly, bushranger and convicted murderer, resulted in a more realistic but still enthralling and thorough examination in an Australian context.

Craig Cormick, science communicator and author, has convened an excellent group of forensic scientists, archaeologists, criminologists, historians, legal and medical practitioners and more to make sense of the bones and to investigate some of the myths of the Ned Kelly legend. The title promises a forensic investigation of the skeletal remains, concentrating on the work of the Victorian Institute of Forensic Medicine, but also incorporating an historical analysis of records. He sees the book as 'a place where history, folklore and scientific analysis can co-exist'.

There are 32 contributors and 26 chapters within the volume. Topics include the archaeological excavation of Pentridge Gaol and the Glenrowan siege site, trauma to the bones, identification of the skeleton and skull using DNA, facial reconstruction and superimposition, death masks and phrenology, autopsy, the Kelly gang's armour and guns, judicial hanging, Kelly's handwriting, legal rites and the police perspective.

This is a fascinating read and it is possible to dip into whichever chapters may interest you.

The book is very well presented with many short chapters, fine diagrams and numerous high-quality colour photographs as well as interesting breakout boxes. While the table of contents is a little confusing as it is not in exact chronological order, a timeline is provided making the task clearer. Some may find it disappointing that in Chapter 1, without any fanfare, the Attorney-General of Victoria states that the skull handed in to authorities in 2009 was not in fact Kelly's.

The brevity of some chapters makes it difficult to do all topics justice. As a forensic anthropologist I often wanted more information on Kelly's bones. While DNA analysis was crucial in the identification, anthropology might have been given more opportunity to tell its story. For example there might have been more discussion on the biological profile of the skeletal remains: what could these bones tell us about the ancestry, sex, age and stature of the person? A breakout box is excellent, but there is no description of this profile. The skeleton was purportedly of European ancestry and male—but how do we know? How old was he at death and how tall was he? Any of these findings might have been used to confirm that skeleton 3081/10 was consistent with being Kelly—or in eliminating that possibility. For example, prison records record Kelly as 5'10" tall; skeleton 3081/10 had a complete femur from which height could have been determined.

Chapter 6 offers a nice description of how forensic odontology and cranial superimposition are performed. Yet there is no mention of the teeth seen in the photograph of the Kelly's skeleton—four from the upper and four from the lower jaw. Why was there no attempt to fit them into the skull? Chapter 8, describing forensic facial reconstruction, was very short, offering no discussion on whether the reconstruction shared any similarity to either historical photographs or Kelly's death mask. Chapter 9, on DNA analysis of the bones and teeth, was excellent and augmented by Appendix 1, which gives further information of the methods of DNA analysis. I also found Chapter 19 on the police perspective a valuable inclusion: the digitization of relevant archival material should encourage debate as those archives will be accessible to not just historians, but the general public.

There were a few omissions. I found the chapter on judicial hanging fascinating, but was

surprised there was no discussion of the remaining cervical (neck) vertebrae associated with Kelly's skeleton. A diagram showing the anatomical structures of the neck would have been a useful addition, especially for the layperson. We find out on p. 233 that there were teeth associated with Kelly's skeleton, but that DNA showed they were from another person. This is the first time these teeth were mentioned. I found the referencing a little uneven with some chapters providing numerous useful references but others supplying none.

Cormick has succeeded in incorporating history, folklore and scientific analysis in his very readable book that will be interesting to both scientists and historians. While these approaches extend and enhance each other, the informal style, short chapters and breakout boxes suggest it is intended mainly for the general public.

Denise Donlon  
Discipline of Anatomy and Histology  
University of Sydney

**Brian Douglas Cooke:** *Australia's War Against Rabbits: the Story of Rabbit Haemorrhagic Disease*.  
CSIRO Publishing: Collingwood, 2014.  
222 + x pp., illus., ISBN: 9780643096127 (PB),  
AUD\$79.95.

Australia's war against the rabbit began in the 1880s, when the New South Wales government offered a £25,000 reward for a system that would exterminate these creatures. Numerous inventions and devices were proposed but the key option emerged from the Pasteur Institute: the release of fowl cholera adapted to kill rabbits. Louis Pasteur's nephew, Adrien Loir, was frustrated in his attempt to demonstrate the effectiveness of this biological control agent and the reward was not paid. However, Australian agriculture tangentially benefited from the venture via the Institute's introduction of an anthrax vaccine.

Myxomatosis in the 1950s was a more convincing breakthrough in the biological control of rabbit populations. The effective release of myxoma virus was delayed until the right environmental conditions prevailed. Ultimately the virus and host adapted to enable both to survive, but myxomatosis continues to exercise some control over rabbit numbers.

The emergence of virulent rabbit haemorrhagic disease (RHD) in Europe and China in the 1980s provided another opportunity for the biological control of rabbits. In this book, Brian Douglas Cooke documents the investigations in Europe and Australia that led to the introduction of RHD virus to control Australia's rabbits. Australia's acceptance of RHD virus to manage wild rabbits is contrasted with how rabbit populations were viewed in Europe, particularly in Spain, France and Portugal.

This text chronicles the expansion of knowledge about RHD virus, including interaction with its host and the impact that controlling rabbit numbers has had on the natural environment and agriculture in Australia, New Zealand and Europe. The extensive scientific study undertaken in Europe, Australia and China is presented in a form that allows the reader to appreciate how this body of knowledge has expanded from the early 1980s to 2014. It is therefore a shame that the author's own biography and his institutional links were not explained in the work, as the book provides a useful survey of the European research environment.

The impact of RHD escaping from the experimental station on a South Australian off-shore island is recounted in detail. While initially devastating rabbit populations in dry inland Australia, its effect on rabbit populations in south-eastern Australia and the wetter coastal areas has been of a lower order. The reasons for this dichotomy are unravelled, with Cooke building the case that opportunities were lost for further reducing rabbit populations. While research in Australia on RHD has been scaled down, Cooke sees a new generation of scientists researching the interaction between the virus and its host to provide future rabbit control strategies using RHD and myxoma viruses.

Cooke's text outlines the interactions between scientific institutions and hunting, agricultural and cultural groups, alongside the concerns of those who considered the biological control of rabbits inhumane and a potential danger to public health. He goes to great lengths to explain his view—echoing the perspectives of CSIRO and state vertebrate control and environmental agencies—that controlling rabbits has advantaged both Australia's natural environment and its agriculture. The author furthermore stresses that the battle against rabbit populations

requires Commonwealth and State government policies—and finance—to encourage farmers, pest control and environmental agencies to maintain Australia's indigenous biodiversity.

A thrust of this book is that scientists need to become engaged in setting political agendas if they want their ideas put into practice. Cooke admits, however, this is no easy task, with contemporary research institutions seen as businesses rather than national resources. The intentional illegal introduction of RHD into New Zealand revealed the worst side of scientific assessment undertaken in haste; there was not a proper perspective provided by relevant scientific researchers and the public were not informed of what the release of RHD could do for the country's environment and agriculture. This episode was reminiscent of Australia's prejudicial assessment of the 1880s.

*Australia's War Against Rabbits* illustrates advances in scientific knowledge of infectious diseases and host interactions. Written in an easy-reading form, the story has relevance for all animal species—including humans. The book should be read by those interested in scientific advancements, and those responsible for promoting and enacting environmental and agricultural policies. Educators and students of agriculture, biology, farming, public health, veterinary and wildlife research should also read Cooke's exploration of RHD and rabbit control.

Andrew Turner  
Veterinarian  
Melbourne

**Rick Wilkinson:** *Return of the Phasmid:*

*Australia's Rarest Insect Fights Back*

*From the Brink of Extinction.* Media

Dynamics: Windsor, 2014. 150 + viii pp., illus., ISBN: 9781876077075 (PB), AUD\$38.50.

Any species being rescued and brought back from the brink of extinction is a rare and heart-warming event, but for the Lord Howe Island Stick Insect (LHISI) it could be called miraculous. Rick Wilkinson takes the reader through a remarkable series of events, from the first tantalising hint in 1964 that the insect still existed on the tiny, precipitous and barely accessible Balls Pyramid, to the discovery there in 2001 of living individuals. From the first stuttering attempts to breed them in captivity, which almost

failed, to their eventual security in viable and healthy captive populations at Melbourne Zoo and elsewhere, the story travels almost full circle, with future plans to eradicate the rats and other feral animals, and reintroduce the LHISI to Lord Howe Island—where the species became extinct some 66 years previously.

Wilkinson's style is somewhat journalistic and matter of fact, but this does not distract from what is a tribute to the dedication and persistence of a multitude of people, and the downright bravery of some, involved in the conservation of this animal. The research is thorough, and the slim volume of just 150 pages is packed with information and lush with illustrations. The author also delves into the history of the discovery of pristine Lord Howe Island in 1788, and its degradation after European settlement by the introduction of alien animals and plants. Rats, especially, are thought to have caused the extinction of much of the island's endemic fauna, including the LHISI.

Wilkinson devotes substantial attention to the personnel involved, and rather less time on the LHISI itself, which I think is a shame. As a biologist I would have liked to know more about the phasmid's biology, evolutionary history, and its place in the ecology of Lord Howe Island. However, this is less of a criticism, and more a case of personal preference. The text shines in Wilkinson's descriptions of the quite hair-raising attempts by conservationists to land on and climb Balls Pyramid, the geological history of the formation of the Lord Howe Island group, and in the historical accounts of European settlement. I found plenty of interest to keep me reading on.

The research is all well referenced, and there are two useful appendices containing extra information about the phasmid, and further historical aspects, as well as a timeline. The book is replete with illustrations (mostly photographs), but a quite lovely painting of a pair of phasids by Dianne Emery is strangely relegated to the very last page, after the index. I felt that this would have been better placed towards the front of the book, if not on the cover.

That the phasmid was even considered for rescue at all is a small miracle in itself. In the current climate conservationists face an uphill battle for scarce funds and resources to try to save the ever-increasing list of threatened and endangered species. Charismatic species such as tigers or orang-utans draw much media attention

and financial support. Wilkinson shows that even an ugly, six-legged 'walking sausage' has a right to life.

Susan Double  
School of Biological Sciences  
Flinders University, Adelaide

**Tony Kanellos (ed.):** *Out of the Past: Views of Adelaide Botanic Garden.*

*A Series of Edwardian Era Postcards.*

The Board of the Botanic Gardens and State Herbarium: Adelaide, 2014. 664 pp., illus., ISBN: 9781921876011 (HB), AUD\$49.95.

*Out of the Past* is a fascinating and handsome book that reveals the history of the Adelaide Botanic Gardens through a collection of 300 Edwardian-era postcards. Portals into the past, these diverse and engaging items tell stories of the Gardens' visitors and admirers, allowing readers to better understand the value of botanic gardens in early twentieth-century society. The book was a wonderful complement to the exhibition *Postcards from the Edge of the City*, held at the Gardens' Santos Museum of Economic Botany (December 2014–April 2015). It also stands well on its own, highlighting the Botanic Gardens and their purpose as an institution dedicated to the collection, cultivation and presentation of plants for scientific and cultural purposes.

The book is divided into two parts. The first incorporates four essays relating to the Adelaide Botanic Gardens by Tony Kanellos, Stephen Forbes, Lisa Slade and Luke Morgan, with a foreword by the eminent botanist David Mabberley; the second comprises a catalogue of 300 postcards depicting the gardens, beautifully displaying the text and image sides of each postcard on corresponding pages. As a collection, the postcards document structures that no longer exist, landscapes changed beyond recognition, methods of public engagement and the 'postcard craze' of the Edwardian era. They also highlight, as Mabberley states, 'the real purposes of the cultural organisations of South Australia, most of them established by enlightened administrations in the nineteenth century'.

Complementing one another excellently, the essays provide interesting and informative observations on the postcards. Covering a

diverse range of subjects, each reflects the interests and background of the writer. Kanellos, Cultural Collections Manager and Curator of the Santos Museum of Economic Botany—Adelaide Botanic Gardens, provides a comprehensive contribution in 'Postcards from the edge of the city'. Describing his impetus to utilise the postcards for the exhibition, Kanellos situates the Adelaide Botanic Gardens in its historic context, examining their place as a popular destination for both locals and tourists in the early twentieth century; interesting given that today they are 'the most frequented cultural and scientific institution in the state'. He also locates the 'golden age of the postcard' in its historic context, analysing the decisions of photographers, manufacturers and senders to depict, create and post these images. While Kanellos sees these choices as representing a democratisation of the ways in which the gardens were represented, he also reflects upon the (non-)appearance of plants across the images.

Forbes chronicles the international role and purpose of botanic gardens, the development of the Adelaide Botanic Gardens, the work of the Gardens' Boards and Directors, and their problems in balancing its scientific and cultural roles. This consideration is particularly apposite given Forbes' own position as the institution's current Director. Contemplating the fascinating interplay between beauty and knowledge, he states that the 'presentation of a botanic garden is seen to illustrate, or even embody, botanical authority'. His own intent, to 'present ennobling botanical knowledge through art and artifice in plant selection and garden design', prompts the reader to ask how these postcards captured the creative tensions between science, art and society.

The essays by Slade, a Project Curator at the Art Gallery of South Australia, and Morgan, a Senior Lecturer in Art History and Theory at Monash University, focus on the value of postcards as objects that 'proclaim the culture that produces them'. They outline the labour-intensive manufacture of hand-coloured postcards, the Victorian (and Edwardian) penchant for collecting them, landscape history from the perspective of the early twentieth-century visitor, and how this collection can 'testify to the role that the Botanic Garden has played in people's lives'.

One downside of this book is that the reader is left wanting more information on the stories behind each individual postcard. However, this would make for a very different book, one that would risk interrupting the journey of discovery of turning through or dipping into the collection. While a reference list of each postcard would also be a welcome addition, the chronological display allows readers to view the Gardens' unfolding changes and developments.

On the whole, *Out of the Past* provides fascinating insights and is a delightful contemporary souvenir of the Adelaide Botanic Gardens. Its success lies in the celebration of postcard writing and the diversity of engagement with this medium. Sometimes crafted with great

finesse, elsewhere scribbled messily, the postcards selected for inclusion divulge a sense of the individuals who wrote them. Whilst several can barely be deciphered, others are blank and many simply wish the recipient 'many happy returns' or the 'complements of the season'—perhaps an unintended irony in the context of a botanical collection exposed to Adelaide's seasonal climatic extremes. All reveal a pride in the city's Botanic Gardens, its importance as an institution during this period, and the wider regard for botanic gardens as significant cultural and scientific institutions.

Rebecca Anderson  
Sydney Quarantine Station