

Reviews

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Ashley Elkins and Elizabeth Stewart (eds):
War Wounds: Medicine and the Trauma of Conflict. Exisle Publishing: Wollombi, 2011.
240 pp., illus., ISBN: 9781921497872 (HB),
\$49.99.

Kirsty Harris: *More Than Bombs and Bandages: Australian Army Nurses at Work in World War I*. Big Sky Publishing: Newport, 2011.
344 pp., illus., ISBN: 9780980814057 (HB),
\$34.99.

War, like illness, is often conceptualised by historians as a dichotomous state. Nations, peoples and individuals may be ‘at war’ or ‘at peace’, just as they may be ‘sick’ or ‘healthy’. Much rarer are historians who acknowledge, or even embrace, the fluidity of such semantic boundaries. Although it is itself a hybrid genre, the history of military medicine tends to perpetuate these dualities.

A decade ago Roger Cooter *et al.* edited *Medicine and Modern Warfare*, which viewed wartime medicine not as a discrete entity, but as a series of contingent collisions between the culture of modernity and the practices of science, industrialisation and combat. More recently, a number of Australian histories—informed in part by the burgeoning field of disability studies—have reshaped the ways in which we view the intersections between war and medicine, including Kate Blackmore’s *The Dark Pocket of Time*, Marina Larsson’s *Shattered Anzacs*, John Raftery’s *Marks of War*, and Michael Tyquin’s *Madness and the Military*. Each of these works is characterized by its engagement with the long-term sequelae of the physical and psychological wounds of war and, in particular, the ways in which borders between military, repatriation, civic and familial structures blurred to create new therapeutic spaces during—and especially after—periods of armed conflict.

I was excited, therefore, in 2009, to learn that the Australian War Memorial was hosting a symposium on military medicine, and equally disappointed that, for logistical reasons, I was unable to attend. Thankfully the convenors have marshalled the papers from the ‘War Wounds’ conference into a volume of the same name. The result is a work that captures the immediacy and variety of the meeting, but at the expense, perhaps, of the opportunity to engage fully with the complexities of the field. *War Wounds* comprises three personal accounts, and eleven historical chapters. The latter average 4,000 words each, with the longer contributions—those by Ashley Elkins and Peter Edwards—proving noticeably more satisfying. This is not to deride the other chapters, but rather to suggest that each of the remaining papers would have benefited from an extension. Happily, some of the chapters in the volume précis book-length treatments (namely, Marina Larsson and Elizabeth Stewart), while it is to be hoped that Kerry Neale’s forthcoming thesis on facially disfigured WWI returnees will also appear in monograph form.

Perhaps the most engaging feature of *War Wounds* is the paired articles, in which Graham Walker critiques, and Peter Edwards defends, F. B. Smith’s official history of Agent Orange within the official medical history of Australian engagements in southeast Asia. At issue is not only the veracity and impartiality of Smith’s account—written in a period when political agendas and biomedical data were constantly shifting—but also whose interests such official histories are meant to represent. These concerns are not new—many of the books cited above also take issue with the official medical histories of World Wars I and II—but what is novel here is the suggestion that such formal documents should remain open to post-publication emendation.

One surprising deficit in the volume is the medical history of WWII. Both chapters on this

period are brief, and both deal with experimentation in German concentration camps: Paul Weindling on wounds inflicted upon female captives (self-styled as ‘rabbits’) by German doctors, and Debbie Lackerstein on attempts by Allied medical staff to rehabilitate overwhelming numbers of liberated inmates. Yet there remain numerous Pacific War topics worthy of exploration, ranging from the nexus of tropical fatigue, combat exhaustion and failures of morale that sapped the Royal Australian Air Force from 1941–45, to the transformation of local medical–scientific infrastructures via the plethora of over 700 research projects instigated during the conflict. While the editors cannot be blamed for what was *not* submitted to their conference, such lacunae only reiterate the scale and complexity of the tasks awaiting historians eager to explore the intersections between biomedicine and the past century’s unprecedented mobilisation, scrutiny and management of belligerent populations.

While many contributions to *War Wounds* felt undernourished, the same cannot be said of Kirsty Harris’s *More Than Bombs and Bandages*. Drawn from her doctoral research, and supported by a well-deserved prize from the Army History Unit, Harris lays out in fine detail the pragmatics of Australian military nursing during WWI. Although army nursing comprises a sub-genre in itself, many previous histories have narrated the emotional and interpersonal networks that sustained women through military service, rather than answering the simple question that motivated Harris: ‘what did [they] actually *do*?’ (p. xiv).

The result is a superb historical resource: that can be read with pleasure and interest, yet will remain a reference work for scholars studying women, warfare and medicine alike. In order to answer her deceptively straightforward question, Harris examined—and urged the National Archives of Australia to digitise—the service records of nearly 2,500 women who staffed the Australian Army Nursing Service (AANS). She also incorporated accounts from period publications, correspondence and memoirs, to elaborate the essence of nursing: the praxis of healing. Through such means Harris acquaints the reader not only with the increasing integration and participation of nurses within the military management of casualties, but also

their diversification, education and adaption to entirely new fields, including surgical procedures, radiography, bacteriology and the challenges of caring for wounded enemy combatants. Each chapter is comprehensive in its remit, yet never subsides into bland demographics. Indeed, Harris constantly leavens her prose with the descriptions and opinions of her historical subjects, complemented by the occasional narrative vignette. In this way, her argument about the contribution of the AANS to Imperial military medicine remains implicit in her methodology, rather than expressed via an overt rhetorical thrust or emotive narrative, arc.

It is the fate of any such single-minded and exhaustively researched account to leave the reader asking for more. Harris details in several chapters both the training of nurses prior to WWI and their adjustments to service life throughout the conflict, but the section detailing post-Armistice legacies feels all too brief. Likewise, the concentration on nurses’ duties never falters throughout the text, but occasionally this focus limits investigations of WWI innovations—such as casualty clearing stations and rehabilitation centres within auxiliary hospitals—that succeeded precisely because they operated as outcome-centred *teams* of practitioners. Appendix I—iterating each of the sites at which Australian nurses served—is perhaps a list too far, and may have been more usefully replaced by a schematic outline of ‘standard’ casualty evacuation, treatment and rehabilitation pathways. Conversely, the compilation in Appendix F of the training hospitals from which AANS members hailed, will be of lasting benefit to researchers, but begs the question as to why the book did not include even a tentative nominal roll of all WWI nurses identified through Harris’s searches?

Such quibbles should not detract from the praise due to Harris’s achievement in *More Than Bombs and Bandages*. Let me conclude by complimenting her crisp, concise and jargon-free prose and the disciplined editing, thorough indexing and attractive layout that make this book both engaging to read and enduring in value.

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Michael Pearson and Jane Lennon:*Pastoral Australia: Fortunes,**Failures & Hard Yakka:**A Historical Overview 1788–1967.*

CSIRO Publishing, 2010. 220 pp.,

ISBN: 9780643096998 (PB), \$69.95.

This book is based on a report commissioned by the Australian Department of the Environment and Heritage to provide ‘historical context’ for the assessment of heritage sites relating to pastoralism. As the authors state in the preface, this involves a comprehensive survey of pastoral history in its broadest terms, and in its local contexts, from 1788 to 1967. This is a laudable and ambitious aim, but with only 180 pages at the authors’ disposal, one that they are not able to fulfil completely.

The book’s contents are arranged chronologically, with four overlapping chapters examining the development of the pastoral industry from 1788 to 1890, a chapter considering the depression and droughts of the 1890s, and early 1900s, and a long chapter considering 1915 to 1967 (when Aboriginal pastoral workers were granted equal pay). A final brief chapter brings the story up to the twenty-first century. There are also twenty-four ‘boxes’ scattered through the chapters highlighting particular aspects of pastoral industries ranging from shearing and droving, histories of individual stations and the origins of ‘Waltzing Matilda’.

Perhaps the book’s greatest contribution to history is its identification and description of large-scale trends in the pastoral industry. For example it draws on Massy’s comprehensive work *The Australian Merino* to provide an accessible account of the importance of sheep varieties and sheep breeding for the economic success of pastoral settlement. It also provides a useful overview of the influence of railways, travelling stock routes and road development in the expansion (and increased production) of pastoral industries.

The strongest sections of the book are ones examining the ‘edge’ of the pastoral frontier in northern and western Australia. The smaller numbers of ‘pioneering’ pastoral stations in these places allow the authors to combine an overview of the shifts of the pastoral frontier with more detailed local histories of individual stations.

In these sections, the ‘boxes’ are particularly well integrated, adding details of specific technologies important to the expansion of pastoral industries and iconic stations. Indeed, the account of political battles over the development of the Northern Territory in the twentieth century is perhaps the most successful section of the book, highlighting failures ‘due to ignorance, misguided enthusiasm, lack of markets and bad luck’.

Presumably, the need to touch on each state and cover several categories (e.g. transport, breeding, meat production, or shearing) is a product of the book’s origins as a report. This is a shame because at times it results in a disjointed narrative. For example, in the authors’ survey of ‘Consolidation and Expansion from 1860–1890’, a comprehensive account of pastoral frontiers in New South Wales and Queensland seems to have been cut short by the need to provide accounts of the other states. These in turn get as little as a single paragraph each. Similar problems occur in later chapters where twentieth-century history of the south-eastern Australian pastoral industry is brushed over in favour of a more detailed account of pastoral frontiers in other regions.

Although the preface states that ‘a major emphasis’ of the book will be the *geographical* spread of pastoralism, I do not think that the authors were able to deliver on this promise. Partly, this is due to a dearth of maps. Throughout the book, numerous localities and property names are given but it is difficult to get a clear view of their location or spatial relationship to one another. For example, the authors’ talk about strings of cattle runs established by the likes of Stanley Kidman, but do not include a map showing the extent of these runs. Likewise, a map showing the main stock routes would have made the book’s conclusions about these more accessible. There is an impressive foldout timeline mapping the expansion of settlement but this, frustratingly, lacks a legend. It is difficult not to see this book as a missed opportunity to utilise the high quality printing characteristic of CSIRO Publishing. To gain the most from the book I would recommend having an atlas or Google maps at hand.

While the authors are careful to note that their book is not an environmental history, they do leave unexamined many of the underlying

environmental forces that drove and influenced pastoral settlement. For instance, they only focus on extreme impacts of climate such as the Federation Drought, and the dramatically variable conditions of the Gulf country. They also tend to give much greater attention to economic rather than environmental factors. For example, the book narrates the fluctuations in the fortunes of the nineteenth century pastoral industry but rarely links these to the climatic or environmental characteristics of the Australian environment. Surely the variability of grass growth or water supply in much of pastoral Australia was central to the ability of Europeans to assess the pastoral capacity of the landscape and expand settlement.

The authors are also careful to squash any expectation that their book is 'a broad social history'. Even so, their lack of treatment of indigenous aspects of pastoralism is surprising. Pastoralism was in many places the principal cause and setting for contact and conflict with indigenous people, much more so than the occasional references in this book would suggest. Likewise, while several of Henry Reynolds' works are listed in the bibliography, his detailed work on early indigenous contributions as pastoral workers is not reflected. The exception is chapter six which details the importance of aboriginal pastoral workers in Western Australian and the Northern Territory in the twentieth century.

Pastoral Australia is a general overview that links together local histories and heritage studies of specific technologies or properties. The authors, as heritage historians, provide an excellent reference to the prominent properties and how they fit into broader pastoral history. It would therefore be a useful resource for local historians and heritage assessors. The book works less well as a general history of pastoralism. Arguably, as the history of Australian land settlement and land use has not been a popular topic among Australian historians since the 1970s, there are few works of synthesis on which Pearson and Lennon might have drawn. Judged in this light, *Pastoral Australia* can be seen as a welcome addition to the history of Australian land settlement.

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David Crotty: *A Flying Life: John Duigan and the First Australian Aeroplane*. Museum Victoria: Melbourne, 2010. xi + 170 pp., ISBN: 9780980619034 (PB), \$29.95.

The story of 'the first flight' in many countries is often distracted by argument and discussion about the event. Australia is such an example, where for too long the honour of that achievement has been bestowed upon the illusionist Ehrich Weiss, as Harry Houdini. Recent debate has cleared the air on the first powered flight in Australia, rightly elevating the English racing driver Colin Defries (1909) ahead of Ralph Banks, Fred Custance and Houdini (all 1910). The basis of disagreement was whether a straight flight of 100 m or so was sufficient to earn that place in history. It was enough for the Wright brothers to secure their place in American history, and so the claim for Defries finally succeeded in Australia.

Somewhat overshadowed by the claims of Defries *et al.* is the story of Australian John Robertson Duigan. David Crotty has written a well-researched biography of Duigan, describing his creation of the first successful Australian designed aeroplane and his subsequent flying experiences in World War I. This book is very generously illustrated with pertinent photographs and drawings. Its size and layout combined with the intermingling of photographs provides for relatively short, easy to read chapters. The text flows smoothly and draws the reader to the next chapter.

A Flying Life begins with a description of Duigan's family background from the prosperous 1880s through to the economic downturn of the early 1890s. Duigan's interest in engineering led him in 1901 to London, where he studied electrical engineering. Following these successful studies, and employment in a light rail company, he returned to Victoria by 1908.

Crotty links Duigan's interest in the new science of flight with the formation of the Aerial League of Australia in April 1909 by George A. Taylor and Charles Rosenthal. They lobbied the Minister for Defence to offer a prize for the first entirely Australian constructed aeroplane. Based on earlier English and American competitions, a set of rules was formulated for awarding what would be a Commonwealth Prize of £5,000, with a further £5,000 through public donations. Taylor

attempted the challenge, but he failed to get a suitable engine. Crotty erroneously notes that Taylor sued his engine builder (p. 35), instead of the young designer, a young man named Middleton (Taylor v Middleton, Supreme Court of NSW, No 1 Causes 7–28 June 1910).

Duigan wrote an interesting letter to the *Argus* (published 8 October 1909), although not mentioned in *A Flying Life*. In this letter Duigan provided not only an assessment of the rules for the Commonwealth Prize, but also added several worthwhile ideas for anyone considering the construction of an aeroplane, such as the approximate workshop area needed and the cost for such a building.

The design process of Duigan's first aeroplane remains somewhat intriguing. He applied to the Department of Defence for a copy of the rules for the Commonwealth Prize in August 1909, but he did not submit his aeroplane to the contest. Crotty confirms Duigan's later claim that he misunderstood one of the entry clauses, regarding the requirement to 'poise'. However, in his correspondence to the *Argus*, previously noted, Duigan clearly stated the uncertainty raised by the particular clause. Why did Duigan write to the newspaper, instead of Defence?

Crotty does not fully clarify the failure by Duigan to enter the competition by the 30 June 1910 deadline. Perhaps, as Crotty suggests, Duigan intended to submit his completed aeroplane, as required by the rules. He does make the observation that Duigan's aeroplane could only carry one person, thus excluding his aeroplane from satisfying another rule, for two.

Duigan ventured back to England and provided a minor, yet important role in the development of the very successful AVRO 504 aeroplane. After obtaining his British pilot's licence in 1912, Duigan returned to Victoria. Crotty outlines Duigan's business and further aeronautical ventures and injuries, which led him to agree with his wife's request to stop flying. When WWI began, Duigan gained a reprieve and served in France, flying RE8 aircraft that performed the exact role for which the Commonwealth Competition had been created. Crotty's examination of Duigan's war experience well demonstrates the fragile nature of those early aeroplanes and the bravery of the men who flew them.

Duigan's flying concluded with the end of WWI and in civilian life he returned to family

and an automotive repair business. Published in the centenary year of Duigan's first flight, this book provides a worthy account of his life, especially for the period 1908–18, during which all his flying was conducted.

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Edward Duyker: *Père Receveur: Franciscan, Scientist and Voyager with Lapérouse*. Dharawal Publications: Engadine, 2011. 41 pp., ISBN: 9780987072702, \$10.00.

Current plans for the Kamay Botany Bay National Park are the latest to recognise the diverse cultural heritage of the Botany Bay headlands. Balancing both indigenous and natural history values must be difficult at a site that essentially commemorates Australia's European discovery. It is interesting then, that while one headland bears a monument to Cook, the other headland commemorates the less well-known French expedition of Lapérouse.

Lapérouse's arrival in Botany Bay coincided with that of the First Fleet and English settlement of Port Jackson. But it was Lapérouse's mysterious disappearance after leaving Botany Bay that truly cemented his expedition into history. For years afterwards, explorers searched for the remains of his expedition until the shipwrecked vessels were finally located in the Santa Cruz Islands.

Not all members of the expedition perished in this shipwreck however. Many had already died along the way to Australia. Twenty-one men drowned in a tidal rip on the Alaskan coast. At Samoa, twelve men died in conflict with a local tribe. On arrival in Botany Bay, the young priest Receveur wrote to reassure his family that he had survived this frightening event with little more than a blow to the head. Alas, Receveur's family would have received his letter only just before news of his death, probably from complications caused by the blow. It is the site of Receveur's grave, maintained by both the English and French, that forms the basis for the Lapérouse Memorial, established some 37 years later by Hyacinthe Bougainville.

Despite the significance of Receveur to the site and to the history of early French exploration

of Australia, very little is known about him. Edward Duyker seeks to rectify this knowledge gap in a slim volume, which publishes for the first time in English, all the available material on and by Receveur. Duyker's research provides us with a tantalising insight into the brief life of the man known to many only as the Frenchman buried at Laperouse.

Even the simplest information about Receveur's age, place of birth, religious and scientific training, and the circumstances of his death, provides a valuable perspective on the kinds of educated, and often socially ambitious, young men who travelled on these high-risk expeditions. Receveur, with his dual expertise in matters spiritual and natural, was a typical candidate for the expedition and, like many others, his scientific contribution to astronomy, geology and natural history would undoubtedly have been greater had he, and his collections, survived and returned to France.

Our appreciation for this Franciscan scientist might have been enhanced with a greater discussion of his scientific and religious context. Nonetheless, Duyker reveals a man whose interest to historians of science extends well beyond his famous grave to illustrate the complex interaction between science, exploration and religion in France at the time. This publication adds further depth to our knowledge of the diverse cultural heritage of the Laperouse Memorial site and European exploration in Australia and the Pacific.

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W. M. Goss and Richard X. McGee: *Under the Radar: The First Woman in Radio Astronomy: Ruby Payne-Scott*. Astrophysics and Space Science Library, vol. 363, Springer-Verlag: Berlin Heidelberg, 2010. 354 pp., illus., ISBN: 978364203140 (HB), €120.00.

The rapid development of radio astronomy in the late 1940s and early 1950s in Sydney is one of the most exciting chapters in the history of Australian science. It is also one of the most intensely studied chapters with a number of books, journal articles and PhD theses on the subject appearing in recent years.

This detailed biography of Ruby Payne-Scott (1912–81), one of the early pioneers in Sydney, is a welcome and scholarly addition to this growing body of work. The biography is somewhat unusual in that both authors are radio astronomers, not historians of science, one is an American (Goss), and they have spent over ten years researching the life of this relatively unknown Australian scientist.

The book is essentially in three parts, with the first giving a chronological account of Ruby's early life—growing up in country NSW, moving to Sydney to attend high school, and then completing an MSc degree at the University of Sydney in 1936. After time spent teaching, Payne-Scott joined the Radiophysics Laboratory in 1941, a new division within the Council for Scientific and Industrial Research (CSIR) set up to carry out secret radar research and development on behalf of the Australian armed services.

At the end of the war the CSIR made a crucial decision not to disband the Laboratory, located on the grounds of the University of Sydney, but to redirect its activities into peaceful applications of radar. In the late 1940s a wide variety of applications were investigated, but radio astronomy soon emerged as the dominant activity of the lab.

The second part of this book, and the lengthiest, is a detailed account Payne-Scott's career in solar radio astronomy until her controversial resignation in 1951. Her first foray into radio astronomy was in fact made before the end of the war. In 1944 she and her boss Joe Pawsey stuck an aerial out a laboratory window in an attempt to confirm classified overseas reports that the sun is a strong emitter of radio waves. Although the attempt failed, this marked the birth of Australian radio astronomy. Pawsey would later be recognised as its founding father.

Over the next six years Payne-Scott and colleagues carried out a series of observations at several Radiophysics field-stations in and around Sydney that helped to understand the complex radio emissions from the sun. These chapters are not for the faint-hearted and the footnotes alone would be enough to fill a small book. They are written in a style that would probably appeal more to radio astronomers with an interest in history, rather than historians of science with an interest in radio astronomy.

The third part is a collection of chapters dealing with different aspects of Payne-Scott's life, rather than a chronological account following her departure from radio astronomy. Ruby was a keen bushwalker, an outspoken member of the Communist Party of Australia (earning her the nickname 'Red Ruby'), an outstanding science teacher at a private girls' school, and a vocal advocate for equal rights and pay for women.

In 1946, Payne-Scott married Bill Hall. Under Commonwealth public service rules at the time, married women could not continue as permanent employees and had to convert to being temporary employees with fewer benefits, a regulation she strongly opposed. She had to suffer the indignity of keeping her marriage secret from her work colleagues. When CSIRO head office discovered her marriage in 1950, no less than chairman Ian Clunies Ross wrote to her demanding she convert to a temporary employee and pointed out that she would lose her superannuation entitlements. She eventually resigned in 1951 when pregnant with her first child, as there was no maternity leave at that time. Her son is Professor Peter Hall, the current Secretary (Physical Sciences) of the Academy of Science.

The book concludes with a lengthy Appendix divided into fourteen sections covering a diverse range of subjects, though some seem only marginally relevant to Payne-Scott. My only significant criticism is that the book would have benefitted from tighter editing to eliminate repetition.

Payne-Scott's brief but brilliant career has until now been overshadowed by others in the Radiophysics group who carved out long careers in radio astronomy. Who will be the market for this biography? The book is probably too long and technical to be useful in inspiring young women in science; however, a shorter popular version is currently in preparation by Goss and should fulfil this role.

Ruby was honoured in 2008 with the establishment of the Payne-Scott Award by CSIRO to financially assist researchers returning to the workforce after family related career breaks. *Under the Radar* will go a long way in making Payne-Scott more widely known to Australians.

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Ron Hateley: *The Victorian Bush: Its 'Original and Natural Condition'*. Polybractea Press: Melbourne, [2010]. xi + 209 pp., illus., ISBN: 9780977524075 (PB), \$45.00.

Europeans invaded the south-eastern corner of the Australian continent before the science of ecology was developed. However, had they bothered to ask indigenous Australians about the vegetation, subsequent ecological studies and management practices could have been based on some understanding of the pre-European condition and history of the vegetation. And a forest ecologist would not have needed to write this book.

Fortunately some Europeans—explorers and surveyors, settlers and visitors—recorded their observations of local landscapes and thereby provided pre-ecological, Eurocentric glimpses of Victoria's diverse vegetation. Fortunately some of their reports, letters and diaries survive in archives and libraries. And fortunately someone with a substantial understanding of Victoria's forests and woodlands has undertaken the time-consuming task of seeking and searching through these primary sources for clues to the pre-European condition and extent of these ecosystems.

For decades Ron Hateley studied Victorian forest ecosystems and taught forest ecology to University of Melbourne undergraduates. However, he became increasingly uneasy about the lack of evidence for widely-accepted claims about the so-called 'natural' and 'original' (meaning pre-European) condition of Victoria's forests—claims that underpin certain management practices. Current practices of burning and thinning forests, eliminating dodder laurel and mistletoe from forest trees, and planting trees to reduce salinity on previously treeless plains, are based on the following widely-held claims—that 'devastating wildfires occurred because we had not maintained Aboriginal burning practices in forests', that 'forests had thickened up since European settlement', that 'dryland salinity had increased dramatically since settlement, the result of tree clearing', and that 'poor management had resulted in massive infestations of them [of mistletoe and other parasites] that killed trees' (p. xi). But where is the evidence?

What were forests really like before the European exploitation frontier reached them?

The Victorian Bush presents forest observations made before and immediately after 1851, Victoria's separation year, when bushfires caused extensive forest incineration and goldrushes dramatically increased the pressure for timber and pasture. Where possible, Hateley compares the records of different observers and allows these to generate questions as well as answers. He shows how records of fallen timber and tree density and height provide evidence of pre-European lightning- and storm-induced forest disturbances.

Particularly interested in the ecological effects of fire, Hateley devotes a chapter to the question of 'fire-stick farming'. In contrast to convincing evidence for Aboriginal impacts on woodlands, he can find no evidence for pre-European Aboriginal burning of Victoria's mountain forests. Instead, these forests seem 'to have been mainly shaped by drought, fires caused by lightning, winds, hailstorms, snowstorms—in other words extreme weather events—and by medium-term climatic cycles' (p. 186).

Hateley's impressive collection of early European records, albeit fragmentary and sometimes of questionable reliability (e.g. interpretations of Aboriginal intentions and actions), provides evidence that challenges widely-espoused ideas that underpin current forest management practices. I hope that this book prompts evidence-based discussions of Victorian forest ecology and management.

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Ed. Ron Hateley died on 24 August 2011.

Jack Hoadley: *Antarctica to Footscray: Arch Hoadley, A Man of Inspiration and Courage.* Sid Harta Publishers: Melbourne, 2010. xii + 460 pp., ISBN: 101921642874, ISBN: 139781921642876, \$29.95.

'My father died the day before my thirteenth birthday', this book opens. 'Father', and subject of this biography is Arch Hoadley who died aged 60 in March 1947, and his son, and author of this biography, is Jack Hoadley. Despite the personal nature of its opening sentence, this book does not show us Arch Hoadley's inner thoughts

or feelings—mainly, it seems, because he was not a man given to self-revelation. Arch was the product of parents who grew up in the context of 'muscular Christianity', and masculine reserve. Even if Arch had lived longer, this distant, although not unloving father, might well have remained so.

Arch Hoadley was born into the confectionary empire responsible for the Polly Waffle, the Violet Crumble and Hoadley's show bags at the Royal Melbourne Agricultural Show. He is most memorable, however, for his participation in Douglas Mawson's Australasian Antarctic Expedition of December 1911 to February 1914. Originally planned to run for a year, the story of this expedition's unanticipated second year is now familiar. In early 1913, Mawson, Ninnis and Mertz failed to return from a sledging journey in time to meet the ship taking them and the rest of the expedition's men home.

When the ship eventually left Commonwealth Bay, six men stayed behind, hoping that the missing men would still return. The six would later learn that Ninnis and Mertz had died, and that Mawson himself only barely survived.

Arch was not among the six men who opted to stay in Antarctica, and there was no possibility that he might have been. The year before, when Mawson and most of the other expeditioners disembarked in Commonwealth Bay, Arch and seven others remained aboard ship. The *Aurora* steamed west for 38 days to Queen Mary Land, in search of a suitable location for what they called their Western Base. The leader of this party was Frank Wild, a popular and highly capable man described by Charles Laserson as ideal for the job.

Arch may have kept a diary during this time, but if so its location is not known. Details of his Antarctic experiences rely on two letters that he wrote to Nell Hoadley (presumably his mother), on diaries and writings of other expeditioners, and on Louise Crossley's *Trial by Ice* (containing the edited diaries of J. K. Davis) and Mawson's *Home of the Blizzard*. As Jack Hoadley notes, these diaries are all 'remarkably silent regarding how the relationships between the men developed or deteriorated'.

The men at the Western Base had a wireless—the first in Antarctica—but the masts they set up for it collapsed before any successful communication could be established. They charted a large tract of coast and made geographical,

glaciological, geological, meteorological, magnetic and biological observations. Arch Hoadley and Watson took hundreds of photographs, and excavated a 30 foot deep shaft in the ice shelf to investigate its structure and layering. Arch also made studies of snow accumulation and auroras. The author observes that the father he later knew 'did not tolerate idleness'.

Though the heroic nature of exploration is the book's main selling point, as emphasized by the balaclava-clad portrait of Arch Hoadley on the front cover, the Antarctic section of this book only comprises 80 of its 460 pages. The bulk of the text deals with Hoadley's later career as principal of Footscray Technical College, a scout-master, and eventually Chief Commissioner of the Boy Scouts Association. This section of the book is less lively than the first, and of less interest to a historian of science. While there is no doubt that the author has laboured long over vast and conscientious researches, or that this family history is a work of great personal importance, unfortunately, its impact is lessened by a lack of a sense of the presence of Arch Hoadley.

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Louisa Anne Meredith: *My Home in Tasmania During a Residence of Nine Years.* vols 1–2. Cambridge Library Collection, Women's Writing: Cambridge, 2010. x + 274 pp., illus. (B&W), ISBN: 9781108020336 (HB), 275 pp., illust., ISBN: 9781108020343 (PB), \$54.95.

It feels decidedly odd to be reviewing a book over a century and a half since its publication in 1852. Of course, this is just the most recent reprinting of what is a classic account of pioneer life in Australia. If I were appraising it in the 1850s my standpoint would be entirely different. I may well have been an anxious family member in England wondering how things were going in the far-off colony, or a potential migrant. In either case Meredith's book would have reassured me that Tasmania, if not the rest of the Australian colonies, was becoming more cultured and comfortable by the minute. I might have considered emigrating—after all, as Meredith promised, potential husbands were plentiful and there was every chance to improve

my station in life. I might even have been inspired to travel to exotic places, where I would write or sketch or both, as she did.

My Home in Tasmania was Meredith's second work on Australia, a companion to *Notes and Sketches of New South Wales*. Together, the two track her voyage from England to Australia and between several homes. They also follow her journey from visitor to colonist, proud to call Tasmania home. Their success brought Meredith renown and income. A measure of the books' influence in recent times is their wide citation. The authors of a great variety of publications draw on them for eyewitness accounts of time and place, and to bolster academic discussions that range from the position of women in society to the process of colonisation, and the history of nature writing.

Meredith's writing career was well underway before she sailed for Australia. She had completed four slender illustrated books of poems and/or wildflowers. Colonial Australia gave her something to really get her teeth into. Her social commentary was shrewd and snobbish but not without humour, suggesting that she intended to ruffle a few feathers, which, of course, added spice to her books.

Meredith's nature writing was as sensitive as her social observations were pithy. The joy she found in the unusual wildlife rose above her professed homesickness for England and Englishness, which were her usual yardsticks both in relation to her surroundings and in social matters. Witness her reaction to the Black Swan:

'as elegantly grave a dress as can be conceived, and the bright coral-red bill gives a gay air to the graceful and expressive head and eyes. I at first missed the curve that looks so stately in the white swan, but soon got reconciled to it' (vol. 1, p. 97).

For natural historians, such as myself, her books are a boon. Unlike some of her male compatriots, she did not paint the wildlife as peculiar. Her accurate portraits were those of an enthusiast and lover of nature. Dry descriptions of specimens by male scientists in Europe were common at the time, whereas Meredith's writings expanded knowledge of the behaviour of native plants and animals in life. Perhaps it took a woman to see beyond the scramble to name and tame, which was never an option for members of her gender anyway.

Meredith continued to write through the birth of three sons and death of one, through several financial setbacks, with a husband who for decades struggled to establish a successful career (but who, with her help, eventually found success as a politician), and the upheaval of many moves when roads were poor and sea voyages perilous. Her two 'travel' books deal with the journey, but not the more personal matters; they are cheerful and never self-pitying.

My Home in Tasmania was a commercial and literary success. The multi-talented Meredith also achieved artistic success with some of her later books. I doubt that income was ever her primary motivation for publishing, but it must have been welcome given the family's financial ups and downs. Writing probably helped her settle into her new home and she clearly thought she had a duty to educate and civilise. Perhaps most of all, she was proud to be a 'useful' woman: 'educated with the refinement of the highest classes, and with the usefulness of the lowest', as reviewer Elizabeth Rigby described her type in the respected *Quarterly Review* (vol. 74). Of Meredith herself Rigby wrote that 'liveliness, sense, and knowledge, and a spring of youthful intelligence are hers'. These qualities stayed with Meredith in all her popular writings.

The times have changed, but *My Home in Tasmania* remains as readable and informative as ever.

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Daniel Lunney, Pat Hutchings and Dieter Hochuli (eds): *The Natural History of Sydney*. Royal Zoological Society of New South Wales: Sydney, 2010. vi + 441 pp., illus. (colour), maps, ISBN: 9780980327236, \$75.00.

As befits its subject matter, there is great diversity within the content of *The Natural History of Sydney*. The thirty-two papers that comprise this volume were each presented at an annual forum of the Royal Zoological Society of New South Wales, held in November 2007. Given this context, it is perhaps not surprising to find also some variability in the quality of the content.

This unevenness illustrated by the authors' use of the term 'natural history'. For many of them the term means the study of faunal species.

The concentration on animals here is perhaps a natural outcome of the conference organizing institution, and in the preface the editors acknowledge this bias. In some papers, however, 'natural history' is used to indicate an activity usually carried out by amateurs in the field; and in others the term denotes a strategy in the fight to conserve natural resources.

The opening chapter provides an introduction to the place of natural history, as an activity, in the world of biological science. The papers that follow seem to be in the same order as that of their delivery at the conference. Nevertheless, the grouping of like papers, such as I have attempted below, would have helped the reader to navigate the wealth of material presented in this 450-page volume.

- Overviews of particular orders or classes of animals: eleven papers look at various taxa, including cicadas (Moulds); marine fishes (Booth); vertebrate fauna (Recher); herpetofauna (Cogger); terrestrial reptiles (Shea); and Campbelltown's Koalas (Lunney *et al.*).
- Natural histories of specific areas: nine of the papers are studies that focus on and relatively small areas, such as Ham Common (Burgin), Kuringai-Chase (Wilks) and western Botany Bay (White).
- Historically focused papers: there is a strong feeling of history running through many of the papers but there are four that are specifically historical in focus, and may be of interest to historians of science. The subjects include Darwin's 1836 visit to Sydney (Nicholas); the Linnean Society (Augee); the Australian Museum (Hutchings) and Sydney's molluscs (Beechey).
- Field and conservation studies: three papers report work in fauna monitoring (Denny), habitat and wildlife enhancement (Brown and Bernhard) and biodiversity recovery (Junor).
- Two papers provide Aboriginal perspectives. Although, thankfully, the days are long gone when we would consider Aborigines as part of natural history, the papers included here are particularly fitting since they deal with Aboriginal perceptions and interactions with particular animal species within the Sydney area.

There is much to like about this book, and a couple of things to positively dislike. On the plus side, the value of this collection of papers, and its

most useful feature, lies in the enormous extent of detailed information it contains. Similarly, the variety of subject matter is impressive and particularly pleasing in that it includes historical aspects.

On the minus side, there is a lack of sound, consistent editing. This is no more apparent than in the foreword by Archer, where some sentences are so tortuous as to be almost incomprehensible. The general layout of the book is not good: apart from the lack of structure mentioned above, elements of poor design such as the use of boxes to enclose the abstract and keywords in each paper, and an uninspiring cover, do nothing to entice the reader. This is a pity because the book serves as an excellent collection of data on Sydney's diverse natural history.

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Ruth Pullin: *Eugene von Guérard: Nature Revealed*. National Gallery of Victoria: Melbourne, 2011. 302 pp., ISBN: 978072410341 (HB), \$69.95, ISBN: 9780724103409 (PB), \$49.95.

Eugene von Guérard: Nature Revealed is a book that accompanies a major exhibition at the National Gallery of Victoria devoted to the life and work of the Austrian/Australian landscape painter Eugene von Guérard (1811–1901). The exhibition celebrates the 150th anniversary of the founding of the National Gallery of Victoria and the appointment of von Guérard, who is said to be the greatest landscape painter of the middle of the nineteenth century in Australia, as its first curator and painting master of the Gallery Art School in 1870.

As well as including an extensively documented list of the exhibited works, the book contains essays by thirty-seven specialist contributors, who deal with such diverse topics as art history, art conservation, geology, geomorphology and the history of science. Ruth Pullin contributes a concise biography of von Guérard, as well as an account of the influences that contributed to his painting. He had been trained from an early age by his father, Bernard, in Italy and was exposed to the influence of German artists

living in Rome, such as Joseph Anton Koch and Johan Christian Reinhart, and the Italian landscape painters, particularly his first teacher Giambattista Bassi. Von Guérard's visits to the volcanic regions of Naples and Sicily and later to the Eifel region in Germany prepared him for what he was later to see in Victoria. At Düsseldorf von Guérard studied under Johann Wilhelm Schirmer, who encouraged his students to paint and sketch directly from nature and show what they saw accurately and in detail. Destinations for his students were the volcanic region of the Eifel and the Neander valley of the Düssel River.

Pullin argues that Alexander von Humboldt's vision of nature and the manner in which it should be documented informed von Guérard's style of painting, particularly through the teaching of his instructors at the Düsseldorf Academy. Humboldt required the painter to commit to detailed and accurate observations of nature, and Pullin emphasises that von Guérard strove to do this. However, detail and accuracy should not be over emphasised, as von Guérard used some artistic licence in fitting outlines of landscape to paper size and in composing his foregrounds.

Michael Varcoe-Cocks, in a major essay, discusses the technical aspects of von Guérard's painting; how he produced his paintings in the studio from the pencil and pen sketches in his sketchbooks by scaling up from the sketches by means of grid squares, which ensured accuracy in proportions and vegetation density. He outlines von Guérard's painting technique and method of using oil paints to get tiny detail and briefly discusses von Guérard's role as curator and painting master and his contribution to the National Gallery of Victoria.

Tim Bonyhady in his major essay charts the decline of von Guérard's reputation in Melbourne and his fall from favour when one of his major works *North-east view from the northern top of Mount Kosciuszko* failed to sell in 1863.

The rest of the book follows the organisation of the exhibition, in which the works are arranged in a series of themes. In the book each of the themes is introduced by a specialist essay. The first three themes cover von Guérard's early years in Italy and Düsseldorf and include paintings by his father, contemporary German and Italian artists of his time in Italy, as well as paintings by his teacher Schirmer and others from the Düsseldorf School that influenced the young

von Guérard. Some sketchbooks and paintings of Bernhard von Guérard are included in the exhibition, allowing the viewer to see the influence of the father on the son. For the first time we are given a unique opportunity to see how von Guérard's style of painting owed so much to his father and to these contemporary European painters. The other ten themes cover aspects of von Guérard's life and work in Australia, including his passion for coin collecting.

Pullin and her colleagues have assembled an impressive collection of works from Australian and overseas galleries and private collections, including some items from von Guérard's descendents. The exhibition will travel to the Queensland Art Gallery and then to the National Gallery of Australia, but many of the works from private and overseas collections will not be shown at these venues, so the book provides a lasting visual record of this magnificent exhibition.

There are reproductions in the book of most of the works and items exhibited, each accompanied by brief scholarly essays by curators or art historians. Unfortunately some of the reproductions are too small to see the details mentioned in the essays and the printing of some of the reproductions is very dark, particularly in the foreground, for example *Milford Sound* and *Mount Kosciuszko*. Several pages selected from von Guérard's sketchbooks are beautifully reproduced. A scholarly book such as this, which has such a wealth of diverse information, should have been provided with an index, but otherwise it is a magnificent book and will remain a standard reference on Eugene von Guérard.

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Woodruff T. Sullivan III: *Cosmic Noise: A History of Early Radio Astronomy*. Cambridge University Press: Cambridge, 2009. 542 pp., illus., ISBN: 9780521765244 (HB), \$260.00.

The eminent astronomer Robert Hanbury Brown remarked in 1993 that golden ages in science are rare and should be recorded, and the emergence of the new field of radio astronomy certainly ranks as a golden age. This was arguably the most important event in astronomy since the

development of the telescope. It marked the opening of the electromagnetic spectrum beyond the narrow realms of optical wavelengths and a whole new era of discovery. In *Cosmic Noise*, Professor Woodruff T. Sullivan III refers to this period as the twentieth-century's New Astronomy, no less important than the earlier New Astronomies of Galileo, Herschel, and the astrophysics of the late nineteenth-century, all of which were triggered by the development of new technologies.

Cosmic Noise is a definitive history of the formative years of radio astronomy, beginning with the first searches for 'Hertzian' waves following their discovery in 1887, and then tracing development from Jansky's original discovery of 'star static' to the re-emergence and exponential growth of radio astronomy following World War II up until 1953.

Sullivan originally trained as a radio astronomer and completed his PhD with the Australian radio astronomer Frank Kerr as his advisor. He began the project that would lead to the publication of *Cosmic Noise* in 1971 and was fortunate to be able to interview nearly all of the pioneers of radio astronomy. Some 24 years in gestation, the project has certainly been worth the wait. During this period Sullivan published two other books (1982, 1984) that have become classics in their own right. *Cosmic Noise* assembles the intellectual, technical, and social factors that shaped early radio astronomy in one volume. Sullivan has drawn upon detailed archives from around the world, collections and correspondence from the period, and coloured these with oral histories from his collection of over 115 interviews. This provides not only a fascinating insight into the development of science, but also the personalities that shaped this science.

Cosmic Noise is a monologue that is organised in a broadly chronological sequence. Chapters 2 to 4 deal with the period prior to World War II, covering the initially unsuccessful search for solar radio waves, Jansky's discovery of 'star static' and Reber's home-made investigations. Chapters 5 to 6 deal with the wartime discovery of radio emission from the Sun, and research by Hey's group in the UK that led to the discovery of the first 'discrete' cosmic radio source, Cygnus-A. Chapters 7 to 9 trace the development of the three main radio astronomy groups to emerge

following World War II: the Radiophysics Laboratory in Sydney, Ryle's group at the Cavendish Laboratory at Cambridge and Lovell's group at Jodrell Bank. Chapter 10 deals with developments by smaller groups throughout the world. Chapters 11 to 16 deal with the increasingly specialised fields of investigation, covering meteor radar, the radio sun, galactic sources and the 21-cm hydrogen line. Finally, chapters 17 to 18 deal with Sullivan's framework for examining the new astronomers and the new science. Here he discusses the role of World War II in kick starting radio astronomy, and the emergence of radio astronomy, not as a new field, but as a specialist area of astronomy searching for acceptance in a visual culture. He also discusses radio astronomy in the context of the opening the electromagnetic window, leading to the development of X-ray, infrared, ultraviolet and gamma-ray astronomy. Extensive use has been made of indexes and cross-referencing, which allows the book to be used as an efficient reference source. Sullivan has also included a useful primer in an appendix for those not familiar with the science or engineering aspects of early radio astronomy.

From an Australian perspective, *Cosmic Noise* highlights the leading contribution made by the CSIRO Radiophysics Laboratory. This

group was led by Joseph Lade Pawsey and made very significant contributions to both scientific and instrumental developments as they emerged from wartime radar research. Sullivan was fortunate to have access to the original archives of the Radiophysics group in the early 1980s prior to their transfer to the National Archives of Australia. Unfortunately, some of these records were lost in the transfer, and therefore Sullivan's comprehensive collection provides some of the last remaining records of this period. My only criticism can be that there are no plans for a second volume covering the equally fascinating period post 1953 to 1960 and the emergence of the 'big' science projects. Fortunately for those interested in the topic, Professor Sullivan intends lodging his private collection material, including the oral histories, with the National Radio Astronomy Organisation archives in the US.

Cosmic noise is thoroughly researched, well written and extensively illustrated with diagrams and photographs of many of the early instruments and researchers. It will appeal to both astronomers and historians of science and will become the standard reference for anyone interested in the development of radio astronomy.

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