



Australian Forest History Society

Newsletter No. 78
December 2019

*"... to advance historical understanding of human interactions with
Australian forest and woodland environments."*



George Brockway: the Forgotten Conservationist

*George Brockway in 1923 when he was
District Forest Officer at Mundaring Weir*

See Roger Underwood's article on pp3-6.

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NEXT ISSUE

The newsletter is published three times a year and the next issue should be out in April 2020.

Input is always welcome.

Contributions can be sent to
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EDITOR'S NOTE

By Fintán Ó Laighín

I wrote a very similar note in the December 2018 issue.

There has been a longer than expected interval since our last issue in May 2019. One of the perils of a volunteer-based organisation is that other things can get in the way. Things like the demands of paid employment and stuff.

Our intention is to have at least three issues a year. Unfortunately, with only two issues in 2019, we didn't achieve that aim this year, but hopefully we'll make up for it in 2020. I do have a collection of half-thought-out ideas for articles which should come to fruition, or articles that I've said I'd write. As we say, contributions are always welcome, and to those contributors who submitted articles some time ago - thank you for your patience.

This month's newsletter covers a variety of topics, reflecting the broad range of subjects that come under the banner of "forest history". We cover the southern half of the country from Western Australia to South Australia, New South Wales, Victoria and Tasmania, and to New Zealand, the United Kingdom and (in passing) the USA.

Roger Underwood's article on George Brockway was a delight to read and deservedly is the subject of this issue's cover. However, the cover article could easily have been Norman Houghton's article on "The Warrnambool Box Factory" of the early 20th century.

We also have a report on the 2019 AGM held in November, and a proposal for a conference to mark the 20th anniversary our "Perfumed Pineries" conference held in Coonabarabran in November 2000.

Thanks to Juliana Lazzari for her help with the editing.

GEORGE BROCKWAY - THE FORGOTTEN CONSERVATIONIST

By Roger Underwood

My career as a forester, and the career of famous forester George Brockway, overlapped by exactly two days. On January 2nd, 1963, immediately after graduation from Forestry School, I took up my appointment as an Assistant District Forest Officer, posted to the (WA) Forests Department's Mundaring District, whose District Headquarters was at Mundaring Weir. On my second day on the job, a distinguished gentleman called in to the office, and I was introduced to him. It was Mr George Brockway, who was retiring on that very day, and nostalgically revisiting the scene of his first appointment, nearly 40 years previously.

Mr Brockway was a tall, spare, slightly stooped man in his mid-60s, with the sort of deep-set eyes and steady gaze of a man who has spent many years in outback Australia, as indeed he had. He greeted me courteously, and gravely shook my hand and wished me well in my future career, before heading out for a day in the bush with my boss, DFO Peter Hewett. I never met him again, but through talking to others and reading his articles and listening to his broadcasts, I came to know him, and I was inspired by his achievements and his lifetime devotion to his profession. I also discovered that the old hut I was batching in at DHQ at the time had been built for George in the 1920s, giving me a direct link to the great man.

And a great man he was. George Brockway was widely regarded as one of Australia's greatest foresters, and had well and truly earned the nickname (bestowed nearly 30 years later) of being "the forgotten conservationist".¹

George Ernest Brockway (always known to his colleagues as George, but as Ern to his family) was born in 1902 in the Perth suburb of Claremont.² He had an uncle who was an orchardist at Karragullen in the Perth hills, the property bordering on the jarrah forest. George spent a lot of his youth working in the orchard and exploring the neighbouring bush, experiences which led to his desire to become a forester. He studied forestry at the University of Adelaide under the great pioneering forester Norman Jolly. He graduated in 1922 and was appointed as a Forest Officer in the embryo Forests Department of WA; he was one of the first four Australian-born professional foresters to work in this state.³

Aged only 21, Brockway was sent to Mundaring Weir and placed in charge of the department's Mundaring

District. This was the first forestry district established in the south-west forests, and it was an important one. The main responsibility was management and restoration of the degraded forests on the Helena Catchment - the water supply catchment for the Goldfields Water Supply Scheme. Effective catchment protection underpinned the entire water supply venture.

Brockway had to build up the administration of the new forestry district from nothing, as well as instituting professional management on forests that for many years had been ravaged by uncontrolled timber cutting, ringbarking and intense bushfires.⁴

His most notable achievement in those years was the evolution of a systematic approach to bushfire management. He built the state's first fire lookouts (at Mount Dale and Mount Gungin), installed the first field telephone lines, recruited and trained the first forestry fire crews, built roads, and was the first to lay down the procedures for effective forest firefighting. He also instituted the systematic "controlled burning" of strategic fire breaks to assist with controlling wildfires.⁵ The fire control system Brockway developed for the Helena Catchment State Forests was ultimately extended right across the forests of the south-west, and later still adopted by forest services in all Australian states.

After setting the Mundaring forests on the right course, Brockway was transferred south where he worked on the establishment of professional forestry in the Kirup and Pemberton areas. However, at about this time he had a falling-out with the departmental hierarchy and resigned, becoming a surveyor.⁶ According to Eric Hopkins (who started his forestry career under Brockway and became his protégé), George was a man who "did not suffer fools gladly", nor did he appreciate the old-fashioned attitudes and rigidity of the Public Service of the day. Moreover, Brockway was a teetotaler, and something of a purist, setting very high standards of behaviour on and off the job for himself and his staff. It is not hard to see how characteristics like this might have led to some career challenges.

However, it was not long before he was brought back into the fold. In 1929, foreshadowing his future passion, he published a remarkable pamphlet called *Advice to Settlers* in which he argued against the widespread clearing of farms because of the devastating effect on soils and water resources. This document is now considered to have been the first prescription ever published for conservation in the WA wheatbelt.

¹ Fordham, H, 1981. "George Brockway: the forgotten conservationist", *The Western Australian Naturalist*, Vol. 17 pp94-96.

² Biographical information provided to the author by George Brockway's nephew David Brockway.

³ The others being Stephen Kessell, Allan Harris and George Nunn.

⁴ The story of the forests of the Helena catchment is told in Underwood, Roger (2017), *The Weir and the Woods*, York Gum Publishing, Perth WA.

⁵ The development of fire control in the Mundaring District is described by Brockway in a seminal paper, one of the first papers ever published on bushfire management in Australian forests: Brockway, GE (1923), "Fire control organisation and fire fighting operations in Mundaring District", *Australian Forestry Journal*, Vol. 6 pp257-263.

⁶ Part of the training of professional foresters in those days (and this persisted right into the 1960s when I studied forestry) was proficiency in surveying. George Brockway would have had all the skills of a qualified surveyor.

Brockway recommended:

Prior to commencement of clearing, [settlers] should give serious consideration to the importance of maintaining in its natural state a fair proportion of the existing timber.

He went on to emphasise that:

... the many advantages provided by trees, including fuel, timber, shade, shelter for stock and habitat for birds, and the aesthetic appeal of trees, cannot be gainsaid.

It would be another 25 years or more before these ideas became acceptable in agricultural WA.

In 1933 Brockway was transferred to Kalgoorlie and appointed Officer in Charge of the department's Goldfields Region. Now began his life's work. Although there had been ranger staff in the Goldfields since the 1890s, Brockway was the first professionally trained forest officer to work there. It was an enormous challenge and a vast jurisdiction. As Eric Hopkins remembers ⁷:

I was a high school student in Kalgoorlie just after the war and I managed to secure a vacation job in the forestry nursery, watering the seedlings. My first recollection of Mr Brockway was seeing him drive up to the nursery in a very dusty, but well-maintained Ford utility after one of his bush trips. He spent most of his working life driving, camping and inspecting the rangelands and woodlands from Halls Creek in the north to Esperance in the south and from Northam in the west to the Nullarbor in the east.

As the Goldfields forester, Brockway had four main duties, all of which required him to spend the bulk of his time in the bush. The first was oversight of the massive firewood industry supplying the mines and the Water Supply pumping stations.⁸ He (and his ranger staff) had to lay out the cutting areas, ensure good standards of utilisation and then manage the regeneration of the cut-over forests. This work was carried out over a huge area west and south of Kalgoorlie, with the woodlines extending hundreds of miles into the bush.

The second was the control of the sandalwood industry. Sandalwood harvesting took place all over the rangelands, with small, isolated teams of independent contractors pulling trees and producing the cut wood for transport to the market in Perth. It was Brockway's job to police the regulations about what size trees could be cut, allocate pulling areas and carry out spot checks on

operations and on the quantities of wood harvested. He also undertook the first studies into the complexities of sandalwood regeneration.

The third job was the mapping the forests and elucidating the botanical resource of the inland. Brockway was an expert botanist, and discovered a number of new tree species (one of these, the Dundas mahogany, was named after him, with the botanical name *Eucalyptus brockwayi* ⁹). During his field work, Brockway became one of the first people to make a systematic collection of seed from the native trees of the region - something that led to two of his greatest achievements: first, the development of nurseries raising seedlings of our native trees, and second the export of seed from WA's super-tough inland trees to India, Pakistan, Israel, Portugal, Morocco and Argentina, where they were used for reforestation of degraded lands in arid climates.¹⁰

Finally, Brockway played a huge role in the conservation of remnant vegetation in the wheatbelt, and in promoting trees on farms. He was responsible for the creation of hundreds of reserves from vacant Crown land which later became the system of small nature reserves that still exist, scattered across the agricultural region.



Dundas mahogany (E. brockwayi) in the Goldfields woodlands
[Photo courtesy of the Forest Products Commission, WA]

In promoting the protection of remnant vegetation and the planting of trees on farms, Brockway was *the* pioneer. Initially it was a lonely task, as the culture of the day was

⁷ Notes provided to the author by Eric Hopkins in 2008.

⁸ This industry is well-described in Bianchi, Phil (2019), *Woodlines: A comprehensive history of the Goldfields Woodlines*, Hesperian Press, Perth WA.

⁹ Gardner, GA, 1942. "Contribuciones Florae Australiae Occidentalis XI", *Journal of the Royal Society of Western Australia*, Vol. 27 pp165-211. The description of *E. brockwayi* is on pp185-186 and advises that "The species is named out of compliment to George Ernest Brockway, Divisional Forests Officer at Kalgoorlie, whose collections of Eucalyptus in his district, and the interest he has taken in the trees of the area, have added much to our knowledge of the genus Eucalyptus in eastern areas." In addition, the introduction to the article (p165) notes that "The collections of Mr. G. E. Brockway, District Forests Officer at Kalgoorlie have resulted in the discovery of some new species of Eucalyptus, and the recording of a hitherto little known species which has been fully described." The paper was read in March 1941 and published in August 1942. The journal is available online through the Biodiversity Heritage Library at www.biodiversitylibrary.org/item/218104#page/4/mode/1up.

¹⁰ The story of seed export from the WA goldfields for overseas reforestation projects is told in an informative article by forester Ian Keally: "Eucalypt Emigrants", *Landscape Magazine*, Summer 1990/91, Department of Conservation and Land Management, Perth WA.

all for clearing trees, not keeping or planting them. George wrote numerous articles for agricultural journals and country newspapers, and delivered talks on the ABC's country hour ... mostly to an unsympathetic audience. In one exchange that became famous, he wrote an article that set out 16 reasons why wheatbelt farmers should plant trees. An officer of the Department of Agriculture responded, setting out 17 reasons why farmers should never plant trees. Number 17 was that the farmer might drive into one of these trees on his way home from the pub on a Friday night.

Nevertheless, Brockway persisted. His first move was to establish a nursery at Kalgoorlie, the first in Australia that focused entirely on raising seedlings of native trees. These were used in a wonderful project of tree planting in the city of Kalgoorlie itself, the end result being an inland, and dryland city with perhaps the finest street trees in the world. Brockway designed the entire project, with a different species on each street, and with a focus on rare and unusual eucalypts with beautiful blossom. He even developed a new hybrid species (the Torwood) which became a very popular ornamental tree.¹¹

Brockway was eventually superseded at Kalgoorlie by another famous "inland forester" Phil Barrett, allowing George to focus all his attention onto the wheatbelt. He arranged for the Kalgoorlie nursery to be transferred to Dryandra, and then later into Narrogin. During this time, as Eric Hopkins recalls:

... George installed a series of arboreta throughout the wheatbelt, the aim of which was to demonstrate which tree species were most suitable for planting for varying purposes and on varying soil types. The arboreta were established on farms with the assistance of a small number of forward-looking farmers, and they ranged from Geraldton to Esperance and everywhere in between. George's main interests were in creating shelter to minimise soil erosion, but he also promoted trees as ornamentals for planting around homesteads. His special favourites were the coral gum (*E. torquata*), the red flowering mallee (*E. erythronema*), and the ever-popular *E. erythrocorys* and *E. caesia*. By 1950 interest was beginning to focus on salinity, and George began to include salt-tolerant species in his plantings, although at this stage the concept of trees as pumps to lower the saline groundwater had not yet taken hold.

George's knowledge about trees was also made use of by the Rottnest Island Authority. In the 1950s, areas of the island were becoming degraded by spray off the salt lakes. Brockway demonstrated how this could be

ameliorated by planting moort (*E. platypus*), a species naturally occurring in areas subject to sea spray on the south coast.¹² Moort is now found all over Rottnest and considered by most people to be native to the island.

An interesting aspect of George Brockway's field work was that Mrs Brockway¹³ often accompanied him. This is not unusual these days,¹⁴ but was frowned upon fifty years or more ago. Mrs Brockway was an enthusiastic artist, and loved to sketch and collect images on the field trips. However she lost some of her enthusiasm for bush camping in later years, as forester Phil Shedley recalled¹⁵:

In September 1951 I was assigned to accompany George Brockway on one of his field trips up to the Carnarvon/Murchison area where there was a dispute simmering between pastoralists and banana growers over the cutting of mulga fence posts and poles on pastoral leases. My job was to share the driving and camping duties and gain experience. Mrs Brockway was accompanying George, as usual.

I was greatly impressed with George's knowledge of the flora, his ability to live off the land and cope with harsh conditions and above all to make me and everyone we encountered feel at ease in his presence. The dispute with the banana growers and pastoralists was sorted out amicably.

On this occasion, George had arranged for Mrs Brockway to stay at the New Norcia mission, and to use this as a base while doing some painting while we were away camping further north. On reaching the monastery buildings, we took her bags upstairs to her room. It was a warm spring day and the whole building was swarming with blowflies and bush flies. There was no flywire on any of the doors or windows. To George's dismay, Mrs Brockway put her foot down and refused to stay there, leaving George the embarrassing task of cancelling the booking without offending the monks - a task he was able to fulfil with his diplomatic skills. We diverted to Dongara, where Mrs Brockway was installed in the hotel, while we headed off on our field work, picking her up a few days later on our way home.

By this time Brockway had transferred to Narrogin. Here he was responsible for the Dryandra and Highbury forests where the department had established valuable plantations of brown mallet. This species is very fire-tender, and Brockway once again found himself designing and implementing a fire control system, as he had done at Mundaring many years earlier. This was so successful that after the mallet bark industry folded,¹⁶ the plantations were still able to be used for production

¹¹ The story of Torwood is told in Underwood, Roger (2019), *The World's Tallest Tree*, York Gum Publishing, Perth WA, pp77-81.

¹² Originally named *E. platypus* var. *heterophylla*, this is now a species in its own right: *E. utilis*.

¹³ Mrs Dorothy Beatrice Brockway, née Winch. "High Beach: Some Western Australian History & Some Family History & Some More". <http://hibeach.net/mannst/p88.htm#i636>

¹⁴ There is a wonderful story by Fiona Kealley, wife of modern-day inland forester Ian Kealley in Underwood, Roger (2017), *Women of the Forest*, York Gum Publishing, Perth WA. Fiona often accompanied Ian and acted as his volunteer Technical Assistant as well as keeping him company on long lonely field trips.

¹⁵ Notes provided to the author by the late Phil Shedley in 2008.

¹⁶ Mallet bark was used for the extraction of tannin, used in making leather. The industry based on brown mallet trees folded after the invention of synthetic tannin. See Underwood, Roger (2019), "Brown mallet", in *The World's Tallest Tree*, York Gum Publishing, Perth WA, pp110-112.

(from thinnings) of timber for axe and hammer handles. Today the Dryandra forest is a haven for endangered wildlife and is one of the state's most admired conservation reserves.

In fact, if it had not been for George Brockway, Dryandra might not be there at all. Forester Steve Quain¹⁷ remembered:

In 1960 when I was stationed in the jarrah forest at Gleneagle, I was put in charge of the Narrogin District during the time D/F Jack Currie was on long service leave. Mr Brockway took me down there to brief me on my duties. He introduced me to all the staff and to the mallet bark industry, the nursery and a number of outlying reserves.

We camped several nights in the bush, and it became quite obvious to me that he wanted to make sure I was on-side with the need to preserve Dryandra and the surrounding reserves. He was well aware that there was a faction in the department, led by George Nunn, who wanted to get rid of the whole Narrogin/Dryandra complex, as it would become a financial burden when the bark industry ended, as was imminent. There was also serious pressure on the reserves from neighbouring farmers who wanted to expand their properties.

George did not have any trouble converting me to his vision of the conservation of the Narrogin District forests, and later I was very happy when I heard his views had prevailed.

Pressure to release Crown land for farm expansion was almost continuous during the 1940s and 1950s.¹⁸ Once the techniques for farming "light land" and gravel soils - the very areas the first settlers had avoided - farmers all over the wheatbelt started covetously looking at bushland over their fences and putting in applications to have them alienated. George Brockway was adamant in opposition, and resolutely refused to approve any alienation of Crown reserves or of bushland on vacant Crown land. One of his techniques was to ensure that any request for alienation of bushland must be first assessed for the value of the flora and fauna by the then Fauna Protection Authority, of which he was a member; another was to promote the concept of bushland corridors so as to ensure continuity of reserved lands as a means of wildlife conservation. These concepts are part of standard thinking today, but were revolutionary in land management at the time.

In 1952 the Forests Department received a request from the government of Pakistan, with funding from FAO, to help with reforestation of degraded land and famine mitigation in the Punjab. George Brockway was the perfect man for the job. He made a number of trips to the subcontinent and to north Africa, spending in all three years on this work, overseeing the establishment of nurseries, firewood plantations and early versions of what today is termed "agroforestry".

Eric Hopkins again:

... there had been visiting "experts" in [the Punjab] before George, but there was absolutely nothing on the ground to show for their labours. George immediately realised the problem and refused to move until supplies of barbed wire and fencing materials were provided so that new plantings could be protected from grazing animals and the starving populace. They were utterly dependent on firewood for cooking and would even "harvest" newly planted seedlings. George devised a nursery system using earthenware pots and other local materials that were freely available in the local economy. Establishing firewood plantations were his first priority and he also set out in a manual the way these must be managed.

In the late 1950s, Brockway, now one of the Forests Department's most experienced and senior officers, was transferred to Head Office, where for a while he served as Deputy Conservator of Forests. But his interest was not departmental administration from an office in the city. He spent most of the 1950s on FAO projects helping with reforestation in Pakistan and India.

George Brockway retired in 1963, and lived only for a few more years. He left behind a magnificent legacy: the street trees of Kalgoorlie, the restoration of degraded lands in Pakistan and India, a network of sandalwood and conservation reserves in the Goldfields and wheatbelt, the wonderfully regenerated Goldfields woodlands and the botanical treasure trove of the millions of trees all over WA, whose seed he collected, which were raised in his nurseries and were planted under his direction. He was also "the father" of trees-on-farms, a concept that today is embraced on all sides and has become an agribusiness in its own right.

Further reading

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¹⁷ Notes provided to the author by Steve Quain in 2008.

¹⁸ I was still dealing with applications from farmers (supported by the Department of Agriculture) for the alienation of state forests in the early 1980s at a time when the Narrogin forestry complex was part of my jurisdiction.

THE WARRNAMBOOL BOX FACTORY

By Norman Houghton

At one time Warrnambool was host to a box factory that made timber packaging boxes for butter. The boxes were used by the several dairy product factories in the immediate region.

The Warrnambool box factory was owned by the Western District Co-Operative Box Co (later the Co-Operative Box Co) that had plants in Warrnambool, Yarraville and Dandenong.

The Co-Op came to Warrnambool from Melbourne in 1911 with the intention of buying McGennan's butter box factory situated near the Warrnambool railway station. Negotiations proceeded almost to finality and then broke down, so the Co-Op decided to proceed on its own. It bought two blocks of land at South Warrnambool, these fronting Pertobe Road (the modern-day address being east of Price Street and approximately on the Warrnambool Lawn Tennis Club courts) and erected an up to date plant there. The new factory opened in December 1912 with rail access on the line to the Warrnambool pier.

A write-up at the time describes the factory thus:

The building is 160 by 110 ft with a brick boiler room 40 by 20 ft, engine room 40 by 20 ft, blacksmith shop, fuel room and offices. It will be equipped with the latest and best machinery available. The timber will be trucked from the stacks into the north end of the factory where it will first be dealt with by a planing and trimming machine, the capacity of which is 200 feet of timber per minute. From this machine it will be passed to the cutting machine where the boards will be rapidly cut to the correct sizes for the butter boxes: then onto the printing machine which puts on the brands and lettering on the sides of the boxes. The next machine is the nailing machine, which is a very fine piece of machinery, enabling the work to be turned out very rapidly. The finished boxes eventually emerge from the east side of the factory, along which the railway siding runs, and they

may be conveniently loaded into the railway trucks. The siding where it adjoins the factory will be roofed so that the loading of the trucks can be carried out under shelter. The transmission of power will be by means of shafting and belting under the floor instead of overhead as in many factories. This system gives more room and a greater degree of safety. Large suction fans will convey the sawdust and shavings as they come from the timber at each machine, into conveyors which will take this refuse right to the boiler furnaces. The whole factory has been planned on a scale somewhat in excess of present requirements to allow for the expansion of business anticipated. At first about 20 men will be employed. Mr Abbey* is the manager.

The butter boxes of this era were made with quarter inch (6.5 mm) sawn board and could hold one cubic foot (0.0283 m³) of butter. The feedstock was imported New Zealand white pine as Australian hardwoods were no good because their saps and oils tainted the contents of the boxes. To this end the box factory received regular shipments of New Zealand timber via the pier line, these being every three months at around 1,200 m³.

In 1920 the imported pine was switched to cheaper Australian mountain ash timber as a way was found to abate the taint in these timbers by using a neutral coating. The new process enabled a butter box to be manufactured for one shilling and nine pence (18 cents) compared to two shillings (20 cents) for New Zealand boxes. The box boards ceased import via the Warrnambool wharf and instead came from mills in the ash areas of Victoria, including Warburton and the Otways.

* Mr Benjamin Abbey (1862-1943) served two terms as a councillor on the Shire of Warrnambool, in 1913-16 and 1920-30, including as Mayor from 1924-26. In April 1991, the City of Warrnambool named Abbey Lane in his honour.
www.warrnambool.vic.gov.au/sites/warrnambool.vic.gov.au/files/documents/property/roads/The%20story%20of%20Warrnambool%20streets.pdf



The Warrnambool Box factory in 1926. It is situated in South Warrnambool, on the railway line to the pier, and is very close to the beach (in the background).



The Box Mill at Beech Forest in about 1921.

The Otway supply was the closest to Warrnambool, being about 150 kms. Here the Co-Op purchased three abandoned agricultural selections totalling 400 ha on the very head of the Aire River about 8 kms east of Beech Forest. In 1920 a mill was placed on the high ground on the west bank. Logs were sourced up and down slope along the river channel and side gullies using a winch and the usual ground snagging methods, but the difficult parts of the site across the river gap were logged with a type of high lead system in the form of a flying fox arrangement that had the logs "flown" across the river gap by wire rope.

The mill commenced operations at the end of 1920 under manager Charles Brown. A good day's output was around 10 m³. At first the mill attempted to send out the sawn timbers by road to Beech Forest but the track from the mill to the Olangolah Road and this road itself was a muddy sloop trap most of the year. Wheeled vehicles had enormous difficulty getting through so after a few months the company laid down an access tramway. This tram ran north-west from the mill for 3 kms along a river head gully to the Olangolah Road and then along the road for 3 kms to make a connection with an earlier built tramway and thence into the Beech Forest railway station.

A large settlement was placed at the mill given the isolated location. The settlement had numerous huts, several houses and a substantial registered eatery for meals. The isolation was part remedied by the company laying a telephone line from the mill office to Beech Forest. Mail was delivered four times a week to and from the Olangolah Post Office, situated nearby, and the mill children attended classes at the Olangolah School. The Box Mill worked until 1926 when the site was cut out and the area abandoned.

The Warrnambool factory then turned to other suppliers in other areas and this kept the plant going for several years until a fire in 1936 damaged part of the works. The company chose to close the place and switch operations to Melbourne.

TRANS-TASMAN TRADE, 1880s-1920s - TIMBER FOR BUTTER BOXES

At the seventh AFHS conference, held in Christchurch in January-February 2007, Brett Stubbs presented a paper titled "Forest Conservation and the Reciprocal Timber Trade between New Zealand and New South Wales, 1880s-1920s" in which he calculated the amount of timber being extracted from New Zealand's forests based on the volume used to make butter boxes in northern New South Wales. The abstract is below.

A substantial inter-colonial timber trade between hardwood-scarce New Zealand and softwood-scarce New South Wales developed in the late nineteenth century. The northern coastal area of New South Wales, that colony's main timber-producing district, supplied mainly ironbark (*Eucalyptus paniculata*, *E. crebra* and *E. siderophloia*) for use in New Zealand's railways, bridges and wharves. North-eastern New South Wales was also that colony's most important dairying district, and kahikatea (*Dacrycarpus dacrydioides*), a New Zealand softwood timber, was imported for the manufacture of butter boxes. The magnitude of this two-way trade created domestic timber shortages on both sides of the Tasman Sea, and stimulated conservation efforts from the early years of the twentieth century. Anticipated shortages of kahikatea also forced the New South Wales dairying industry to seek alternatives, including the arguably less suitable indigenous hoop pine (*Arancaria cunninghamii*), for its butter boxes.

It was one of a number of papers from the conference published in a special issue of *Environment and History*, vol. 14 no. 4 - see www.whpress.co.uk/EH/EH14.html and www.whpress.co.uk/EH/EH1420.html.

2019 ANNUAL GENERAL MEETING

The society's Annual General Meeting was held in Canberra on Thursday 14 November 2019.

President's Report - Sue Feary

Welcome to society members present at the AGM and thank you for your attendance. I apologise for my absence but am unable to attend as I am currently on an Australian Volunteer assignment in Solomon Islands. My assignment is to mentor the government in establishing its first government-owned national park, just outside Honiara, the nation's capital. Probably the most well-known fact about this otherwise amazing country and people is that its forests have been unsustainably logged for decades. A critical point has been reached where forestry, once the major contributor to GDP, can no longer do so, leaving the country desperately scrabbling for an alternative source of export income. Perhaps a little more attention to history could have prevented this dire situation.

I have decided to step down from the role of president of the society, a position I have held for around five years, following Greg Barton and before him, Brett Stubbs. I am pleased that during my time we ran a successful conference at Mount Gambier in 2015, with the majority of papers available on the website. There have also been substantial improvements and additions to the website, thanks to the efforts of Jan Oosthoek. Improvements have included creating a Twitter account in an effort to attract younger prospective members.

The newsletter continues to be the "face" of the society - it can be relied upon to generate interesting, high quality articles on all aspects of forest history on a regular basis. I would like to acknowledge what an excellent job Fintán Ó Laighin is doing as newsletter editor, and extend thanks to guest editors and of course all the contributors.

Although I am stepping down as president, I would like to remain involved in the society as a committee member because I am in no doubt about the importance and relevance of forest history in understanding our role as human beings on the planet. The society may have to reinvent itself in order to remain a viable organisation but at its very heart will always be the stories of the people who have lived in, worked and loved the forests.

Treasurer's Report - Fintán Ó Laighin

The society's financial position remains relatively stable, but continues to slowly decline as a result of the society's reduced activity. In the early years, income from conferences funded the society's operations, but our most recent conferences (held in June 2010 and October 2015) - while successful as conferences - did not generate the surpluses of earlier conferences.

By far the most significant expense is the production of the newsletter which we aim to publish three times a year. The cost of producing and distributing the newsletter is roughly offset by the income earned through memberships. Most of the operating deficit of 2018-19 can be attributed to the decline in memberships, something that the committee hopes will be addressed in 2019-20.

The 2019-20 Committee

The first Big Change to the committee is that Sue Feary, as noted in her report to the AGM, has stepped down as president, a position she assumed at the 2014 AGM; however, she continues as a member of the committee. The position of president remains vacant.

The second Big Change is that Stuart Pearson has joined the committee for the first time.

The following committee was appointed:

President:	Vacant
Vice-President:	Jane Lennon
Secretary:	Kevin Frawley
Treasurer:	Fintán Ó Laighin
Committee:	Peter Evans Sue Feary Juliana Lazzari Stuart Pearson
Public Officer:	John Gray

CONFERENCE PROPOSAL - PERFUMED PINERIES 2020

New committee member Stuart Pearson has proposed that the AFHS convene a conference in November 2020 to mark the 20th anniversary of our "Perfumed Pineries" conference held in Coonabarabran in November 2000. Stuart spoke about this at the AGM and his idea was well-received. He will work on a proposal to submit to the committee.

For those who need a recap on the 2000 conference, as editors John Dargavel, Diane Hart and Brenda Libbis note in the preface to the proceedings of the conference:

The perfumed pineries have survived heat, aridity and cold in Australia for at least a million years. They range from semi-arid scrublands to tropical woodlands. The first people named the trees: munlarru, marung, marinhi, pimba or binba, gurraay, jinchilla, karapaarr and puratharr, kulilypuru or kuli, karntirrikani, and more, each particular to people and place. European settlers called them pine: Oyster Bay, Port Macquarie, Murray River, white, black and several more. Botanists placed them in a genus they first called *Frenela*. Now it is *Callitris* with fifteen species spread across Australia and two in New Caledonia. They yield termite-resistant timber for houses, fences, poles or mines. They produce blue and green oils for aromatherapy and a resin whose collection, we think, once prompted the famous forester, Harold Swain, to call them the 'perfumed pineries' of our title. Their greatest forest is the Pilliga of New South Wales - *A Million Wild Acres* to the many readers of Eric Rolls' evocative history.

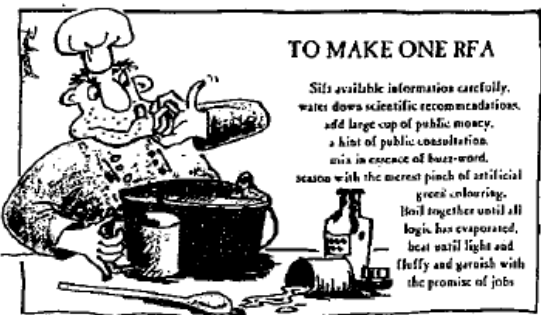
The proceedings from the 2000 conference can be downloaded from <https://openresearch-repository.anu.edu.au/handle/1885/9532>.

FOREST PROTEST EPHEMERA

By Fintán Ó Laighin

One aspect of forest history that we don't focus on in the newsletter - not because we're against writing about it, but because no one submits articles - is forest protest. Here are some flyers (including a double-sided one) that I came across earlier this year in the Forestry Building at the ANU, in the Fenner School of Environment and Society.

The recipe was rotten



TO MAKE ONE RFA

Sift available information carefully,
water down scientific recommendations,
add large cup of public money,
a hint of public consultation,
mix in essence of buzz-word,
season with the merest pinch of artificial
green colouring,
boil together until all
logic has evaporated,
beat until light and
fluffy and garnish with
the promise of jobs

..... the eating was worse

It's time to turn over a new ...

no way rfa

... leaf and take action


- 1. Support the possums case**
Donate to Friends of Leadbeater's Possum and Environmental Justice Australia to support their Federal Court challenge to the RFA exemption from federal threatened species laws
<https://chuffed.org/project/give-possums-a-chance>
- 2. Get informed**
Friends of Leadbeater's Possum <http://leadbeaters.org.au/>
Environmental Justice Australia <http://envirojustice.org.au/>
End the One Stop Chop <http://onestopchop.org/>
- 3. Get involved**
If not you - who? If not now - when?
Mogo has one, Corunna has one, Noojee has one, Mirboo North has one, so do south-east and north-east NSW, the Strathbogie, the Rubicon and more. What about a forest action group for Canberra???

**For possums not paper, clear skies
not clearfells, forests not woodlots**

no way rfa

FORESTS
AN INTRODUCTION FOR ACTIVISTS

*Are you keen to fight for our forests & climate?
Horrified by logging & its impact on wildlife?
Wondering how to get started? This is for you!*



6pm WEDNESDAY 14th AUGUST
CONSERVATION COUNCIL ACT
presented by the Canberra Forest Alliance
www.onestopchop.org forest.nwk@gmail.com

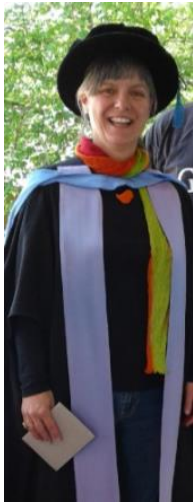
The National Library of Australia (NLA) has a collection of Australian printed ephemera which it has been selectively collecting since the early 1960s as a record of Australian life and social customs, popular culture, national events, and issues of national concern.

The NLA's collection contains forest conservation ephemera, including material issued by the Boral Green Shareholders group. The library's catalogue reference (<https://catalogue.nla.gov.au/Record/7732448>) says that the group "was formed in 1994 ... to lobby the company to implement and report on environmental sustainability initiatives. The group convened specifically to influence the phasing out of woodchipping and high-volume sawlogging operations in old growth and wilderness forests, and the habitats of endangered species, and to lobby the company to concentrate on existing plantation resources utilising responsible forest management practices."

The collection also includes material from "The Australian Greens ... political party which was formed in 1992 from a confederation of eight state and territory parties. In addition to environmentalism the party cites four core values: ecological sustainability, social justice, grassroots democracy and peace and non-violence. Party constituencies can be traced to the early environmental movement in Australia and the formation of the United Tasmania Group (UTG), one of the first green parties in the world, the nuclear disarmament movement in Western Australia, and sections of the industrial left in New South Wales. Former leaders of the party include Bob Brown and Christine Milne."

(<https://catalogue.nla.gov.au/Record/1074028>)

ANU PHD ON FIRE ECOLOGY IN SOUTH AUSTRALIAN MALLEE WOODLANDS



Congratulations to AFHS member (and committee member) Juliana Lazzari for being awarded a PhD in a recent ceremony at the Australian National University in Canberra.

Her thesis was undertaken at the Fenner School of Environment and Society and focussed on the semi-arid mallee woodlands of the Eyre Peninsula of South Australia.

It is titled "Fire and fragmentation interactions: effects on reptiles and small mammals in modified semi-arid landscapes".

Her thesis is available on the ANU's

Open Research library at <https://openresearch-repository.anu.edu.au/handle/1885/177008>. The abstract is below.

Interactions between fire and fragmented landscapes could be a primary factor influencing the distribution and persistence of species. However, historical and recent land use change and land management practices have altered the spread, frequency and intensity of fires globally. This presents a major challenge to biodiversity management because ecosystems are being modified by fire in already fragmented systems.

Within fragmented fire-affected landscapes, the use or suppression of fire can provide successional habitats for a range of biota. However, records of fire history that are essential for managing fire-sensitive species, are often limited for many reserves and for remnant patches on private land. In addition, little is known about how reptiles and mammals use fragmented fire-affected landscapes, nor the role of reserves and remnants in mediating the interacting effects of these two major disturbances on co-occurring species.

Due to this gap in understanding biodiversity responses to fire in fragmented landscapes, inappropriate fire regimes in such landscapes could lead to species losses. My aim was to understand species responses to interactions between experimental fire and habitat fragmentation in an agricultural matrix.

To achieve this, I conducted studies that specifically addressed:

- 1) the current status of research,
- 2) how to build on current knowledge to predict fire age,
- 3) reptile trait responses, and
- 4) how small mammals are affected.

For study 1) I undertook a systematic review of the literature that discusses the fire-fragmentation interaction effects on biodiversity. For study 2) I developed a model to predict fire age using

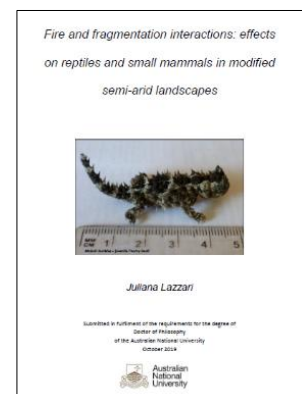
environmental covariates and stem diameters. For studies 3) and 4), I undertook a natural and manipulative experiment using fire in remnants and trapped reptiles and small mammals.

The key findings are:

- 1) there is limited peer reviewed research that investigates the effects of fire interactions with habitat fragmentation on biodiversity;
- 2) that local environmental covariates influence stem diameter growth, showing strong modelling potential to predict fire age;
- 3) that reptile trait responses to fire by fragmentation interactions were not detected, but prescribed fire in remnants close to the reserve, with initially low abundance, may provide colonisation opportunities for insectivorous, nocturnal or burrowing species; and
- 4) that the occurrence of native mammals was affected more by fragmentation than by fire, including a lower occurrence in remnants than the reserve and in remnants further from the reserve, and conversely for the exotic mammal.

To improve our knowledge of reptiles and mammals in fragmented fire-affected, semi-arid mallee cropping landscapes, I recommend that: i) further testing and refining of the fire age prediction models to improve the reliability of mapping fire ages in remnants and reserves; ii) further research into species specific responses be undertaken, including by using reptile mark-recapture data collected in this study; and iii) future studies be undertaken over a longer period than my three year study. Also, to inform and improve conservation management of these species already persisting in small, long unburnt and isolated patches, I recommend that: iv) the use of prescribed fire in reserves and remnants be minimised while v) more study is conducted to fill the research gaps into the effects of fire interactions with habitat fragmentation on species responses.

In making these recommendations, I emphasise that management strategies targeting the conservation of reptile and mammal persistence in fragmented and fire affected mallee landscapes, need to i) take a precautionary approach to using prescribed fire, particularly while many of the cause and effect relationships of multiple environmental threats have not been established scientifically, and ii) urgently be informed by empirical research of reptile and mammal species in these landscapes.



WOODLAND HISTORY CONFERENCE, OCTOBER 2019

A recent post on our Twitter site - twitter.com/AustralianFHS - noted that the (Scottish) Woodland History Conference was held on 24th October 2019, organised by the National Woodlands Discussion Group (NWDG).

The theme for the conference was "One hundred years of state forestry in Scotland". The conference program is on the NWDG website at

www.nwdg.org.uk/events/conference:

- A brief history of the Forestry Commission* (James Ogilvie)
- The birth of the Forestry Commission* (Jim Miller)
- The impact of the Flow Country controversy on Scottish forestry* (Charles Warren)
- Native woodlands in Scotland: the last 100 years* (Neil MacKenzie)
- Machines and men: post-war research and development* (Andy Neustein)
- Glenmore reflections: an oral history* (Mairi Stewart)
- Forestry Memories: 100 years of Scottish forestry in pictures* (Norman Davidson)
- Reflections and looking forward* (Gordon Gray Stephens)

The NWDG is a not-for-profit membership group and is open to anyone interested in the ecology, management and history of native woodlands in Scotland and northern Britain more generally. Its membership includes ecologists, foresters, staff from government and non-government agencies, people who work with restoration projects or community woods, people involved in woodland history and archaeology, students, teachers and many others who share its interests. It also has among its members artists, musicians, writers and others who draw inspiration as well as enjoyment from our native woods.



Felling in Scotland 1922

CENTENARY OF THE BRITISH FORESTRY COMMISSION - ROYAL MAIL STAMP ISSUE

The British Forestry Commission was established in September 1919 and, to mark the centenary, Royal Mail issued a set of six stamps on 13 August, featuring images of forests from across the United Kingdom:



- Top: Glen Affric (Scotland) and Sherwood Forest (England).
- Middle: Glenariff Forest (Northern Ireland) and Westonbirt, the National Arboretum (England).
- Bottom: Coed y Brenin (Wales) and Kielder (England).

The stamps are complemented with a presentation pack that includes pages on "Forests through the ages" and "Flora and fauna of forests in the UK", a set of six postcards, and a special first day cover.

More information on the Royal Mail website at <https://shop.royalmail.com/special-stamp-issues/forests>.

In February 2014, Royal Mail issued a series of six stamps on working horses, one of which featured a "Forestry Horse" which, according to horse "expert" Juliana Lazzari, is likely to be either a Clydesdale or a Shire:

"A variety of ponies and draught horses work in forestry, shielding delicate environments from the harm that vehicles would cause, while at the same time protecting the future of their breeds."



NEITHER LOVE NOR LUST JUST SOLID EGOS

By Steve Thomas *

It is always surprising how much angst and down right nastiness trees and their management can induce in individuals. I hesitate to say communities as every community has a wide range of responses from indifference to aggression.

This has been the case for a long time. The story of William Ferguson and Ferdinand von Mueller is one such case.

William Ferguson (c. 1827-1887) was an experienced forester who had worked in large estates in Britain before coming to Australia. He soon began working for J.H. Brooke the owner of Mount Eagle in Heidelberg where he planted many of the fashionable pines recently introduced from America. Later he moved to work for Hugh Glass of Flemington House planting huge quantities of pines from many parts of the world via Kew gardens.

By 1866 he was working on forest plantings which he considered vital for the colony. He was appointed Inspector of Forests in 1869 to address the 'wanton destruction' of the forests and plant suitable species for the wood supply of the colony.

In 1869 he accepted the position of curator of the Melbourne Botanic Gardens where he came up against the formidable von Mueller.

In 1870 a friend of von Mueller, William Lockhart Morton writing in the *Argus* called Ferguson a mere landscape gardener. The conflict between the two boiled down to a difference of opinion about the role of the two men and the purpose of the gardens. Von Mueller took every opportunity to undermine Ferguson. Things came to a head in 1872 when the Minister for Lands J.J. Casey summoned both to his office where they aired their grievances. Ferguson lost his cool making a personal attack on von Mueller and his staff. This was a strategic mistake and shortly after Clement Hodgkinson separated the two rivals. Ferguson went to set up the State Nursery at Mount Macedon. By June 1873 he had planted three acres with the 'choicest best kinds of Himalayan and Californian timber trees'. He continued to rile against the destruction of the forests and spent some time planting acacias along railway lines for the tanning industry.

Von Mueller was removed from the position of director of the Botanic Gardens on 31st May 1873 but remained the Government Botanist. He never entered the gardens again.

Fox P., 2014. *Clearings*. Miegunyah Press Imprint Melbourne University Publishing.

* Reprinted from *FACTT News*, December 2019, published by the Friends of ACT Trees (formerly Friends of ACT Arboreta). For more information, see <https://sites.google.com/site/factacanberra> and <https://sites.google.com/site/factacanberra/news>. The December newsletter also includes an article on "our" John Dargavel (pp5-7).

INSTITUTE OF FORESTERS OF AUSTRALIA - DIGITISATION OF CONFERENCE PROCEEDINGS

By Kim Wells

The IFA is digitising all the old IFA conference proceeding up until 2003. CSIRO's Black Mountain Library has been very co-operative in helping the IFA with proceedings that it holds but which the IFA doesn't. However, the IFA is seeking a few, from its 1st, 2nd, 7th, 10th and 11th conferences, namely: 1954 Canberra; 1958 Canberra; 1974 Caloundra (Vol. 1); 1983 Melbourne (Vol. 1); and 1985 Hobart.

If any readers have copies of these proceedings that can be lent to the IFA for scanning (or even donated), please contact Kim Wells at kwells@velocitynet.com.au.



Postscript: A copy of this request was sent to some AFHS members who have been involved in the IFA and elicited a response from Ian Bevege who said that he has both volumes of the 1974 Caloundra proceedings. He invited Kim to contact him so that they could be borrowed, although I don't know if that has yet been done. The National Library of Australia also holds papers for most of these conferences, although possibly not the proceedings.

THE BIODIVERSITY HERITAGE LIBRARY

By Fintán Ó Laighin



Roger Underwood's article on "George Brockway: the Forgotten Conservationist" (pp3-6) cites one article as

having been drawn from the Biodiversity Heritage Library (BHL) (see footnote no 9, p4).

The BHL is hosted by the Smithsonian Institution network of Websites and was established in 2006 following a series of meetings that commenced in 2003.

It was created to address a major obstacle to scientific research: lack of access to natural history literature. This literature underpins the work of researchers around the world by providing species data and descriptions, ecosystem profiles, distribution maps, inter-dependency observations, geological and climatic records, and more. At a 2003 meeting funded by The Andrew W. Mellon Foundation, scientists stated that providing free, online access to this literature would greatly improve the efficiency of research worldwide.

The BHL has members and affiliates around the world, including 24 participating institutions in Australia and the Auckland Museum in New Zealand.

The website is at www.biodiversitylibrary.org with more information at <http://about.biodiversitylibrary.org> and <http://about.biodiversitylibrary.org/about/history-of-bhl>.

AUSTRALIAN HISTORICAL ASSOCIATION CONFERENCE 2020 - "URGENT HISTORIES"

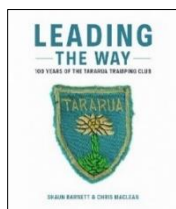
The 39th Australian Historical Association (AHA) Conference will be held at the Deakin University Geelong Waterfront Campus from Monday 29 June to Friday 3 July 2020, hosted by the Deakin University Contemporary Histories Research Group. The conference theme is "urgent histories":

Today, the need to interrogate the past is more pressing than ever. Historians are now both scholars and actors in the face of worldwide political efforts to realign the past to fit present imperatives. This conference calls us to consider the place of history in current political discourses. Embracing the contestability of explanatory stories, different theoretical and methodological vantage points, 'urgent histories' invites historians to focus on the uses of the past in contemporary public debates, disputes and narratives. The convenors welcome proposals for papers, panels and roundtables on any geographical area, timeperiod, or field of history, especially those relating to the theme of 'urgent histories'.

Abstracts are to be submitted by 29 February 2020. Further information at www.theaha.org.au/aha-conference-2020-urgent-histories and www.deakin.edu.au/aha2020. Recent AFA conferences have included a "Green Theme" of environmental history.

NEW BOOKS AND PUBLICATIONS

Thanks to Mike Roche for advice of the New Zealand publications.



Shaun Barnett and Chris Maclean, 2019. *Leading the way: 100 years of the Tararua Tramping Club*. TTC with Potton & Burton, Nelson, New Zealand, 364 pp. ISBN 9780473461744.

From the notes of a talk presented by the authors at the National Library of New Zealand
<https://natlib.govt.nz/events/leading-the-way-100-years-of-the-tararua-tramping-club-july-03-2019>.

When Willie Field and Fred Vosseler founded the Tararua Tramping Club (TTC) in 1919, they began a century of organised tramping in New Zealand. In 1919, most people viewed tramping as an odd form of recreation. Today tramping has become one of New Zealand's most popular leisure pursuits.

The club also fostered climbing, embraced skiing and encouraged women to participate in all these activities. And its leaders encouraged the formation of other clubs throughout the country. For many, the TTC became 'family', it was a place that generously welcomed everyone.

By drawing people together in the social atmosphere of the clubrooms and in the mountains of New Zealand and overseas, the TTC fostered many life-long bonds, friendships and marriages. Within the context of 100 years of organised tramping in New Zealand, Chris

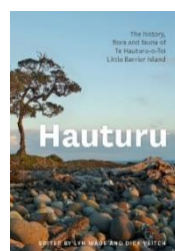
Maclean and Shaun Barnett, authors of 'Leading the way', discuss:

- how the club formed
- why it was a success, and
- how it set a model for other clubs to follow.

Shaun Barnett grew up in the hills of Hawke's Bay, worked for the Department of Conservation, then became a freelance writer and photographer. His 'Classic Tramping in New Zealand', co-authored with Rob Brown (1999) won a Montana Book Award. Between 2008 and 2018, Barnett also edited the Federated Mountain Club's magazine, 'Backcountry'.

Chris Maclean learnt to tramp in the Wellington hills and later wrote 'Tararua: the Story of a Mountain Range' (1994). Its success encouraged him to become a full-time writer, after years working as a stained-glass artist. His book 'Kapiti' (1999), won a Montana Book Award.

Note: An audio of the talk (45 minutes) is available at
<http://newzealandhistory.podbean.com> and
<https://www.podbean.com/site/EpisodeDownload/PBB6A00CB59TY>. The book can be ordered from the TTC:
www.ttc.org.nz/pmwiki/pmwiki.php/Centenary/CentenaryBook.



Lyn Wade and Dick Veitch, 2019. *Hauturu: The history, flora and fauna of Te Hauturu-o-Toi/Little Barrier Island*. Massey University Press, Auckland, New Zealand, 400 pp. ISBN 9780995109582.

From the publisher's notes.

A richly illustrated account of the island's diverse plants and animals, and the people behind this globally significant conservation success story.

Rising to the highest point in the Hauraki Gulf, Te Hauturu-o-Toi/Little Barrier Island stands sentinel over its rare and endangered birds, plants and animals. It is home to New Zealand's most diverse native bird and reptile communities, a prodigious number of seabirds and a vast array of invertebrate fauna.

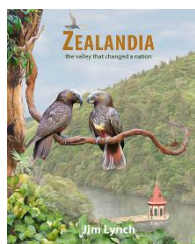
New Zealand's first nature reserve, it is also a global symbol of conservation success and innovation. The island's story is not just of its animals and plants, but of people, too: of Ngāti Manuhiri and Ngāti Rehua, the tangata whenua, and of the rangers, researchers and volunteers whose efforts have inspired the conservation world.

Written by experts across a range of fields, this book is a comprehensive account of the history and biodiversity of a very special place.

<https://www.masseypress.ac.nz/books/hauturu>

Note: A 23-page preview is available at
https://issuu.com/masseypress/docs/pages_from_hauturu_f8751b66962866. A short (50 second) video introduction to the book presented by co-editor Lyn Wade is available at
<https://youtu.be/jjYm18PbyAo>.

Copies can be ordered from the Little Barrier Island (Hauturu) Supporters' Trust - www.littlebarrierisland.org.nz/research-and-publications/Published-Research.



Jim Lynch, 2019. *Zealandia: The Valley that Changed a Nation*. Kotare Publications, New Zealand, 240 pp. ISBN 9780473490119.

From the publisher's notes.

In 1990 Jim Lynch came up with the revolutionary idea of "urban

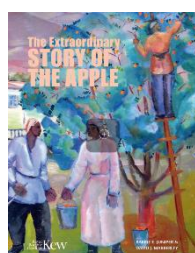
conservation" expressed in a radical plan to "Bring the Birds back to Wellington". Two years later he came up with the even more daring concept of "community conservation". His visionary 1992 proposal for the Karori Wildlife Sanctuary (now Zealandia) imagined a predator-fenced, community driven eco-sanctuary, populated with endangered species and located just 2 km from the Wellington CBD.

30 years later, due to the combined efforts of thousands of dedicated people, both initiatives are resounding successes. *Natural Wellington* and Zealandia have transformed Wellington from a biological cot-case into an international showcase of urban conservation and, inspired by Jim's vision and Zealandia, community conservation took off around the nation to become the most dynamic area of growth in New Zealand conservation in recent times.

This book is the story of how one man's dream became a reality and changed a city and a nation. It is an uplifting account of an unlikely journey; of daring innovation, of the grit and determination of an ever expanding community that seized the dream and pursued it against the odds to build a jewel that will be treasured by generations yet to be born. It is a celebration of the people who made it all happen.

<https://jameslynch.org/book-zealandia>

Note: A short video (5:49 minutes) is available at
<https://www.youtube.com/watch?v=B21ruDck00M>.



Barrie E. Juniper & David J. Mabberley, 2019. *The Extraordinary Story of the Apple*. Kew Publishing, London, United Kingdom, 260pp. ISBN 9781842466551.

From the publisher's notes.

A second edition to the 2006

The Story of the Apple, this fascinating

book is illustrated throughout with colour illustrations, paintings, photographs, and line drawings, and will make the ideal read for gardeners, growers, botanists, historians, archaeologists and zoologists alike.

Although we may often think of the apple as quintessentially English, its origins lie in China. The apple (the *Malus* genus) arose in the Tertiary period (5.3-1.8 million years ago) in southern China and spread through a continuous corridor of temperate forest as far as western Europe. This book details the natural and cultural history of the apple, using DNA evidence, from its origins in China, along the Silk Road to Europe and onto the Americas and Australia.

The apple has long been one of the most important fruits in the temperate regions of the world, and was apparent by the times of the Persians, Greeks, and Romans. Favoured throughout human history as a food source of great nutritional value as well as being remarkably convenient, as the apple can be stored throughout a harsh winter or easily transported over long distances.

Native bears were key in the spread of the larger apples, favouring them over the smaller, less sweet fruits, and as such, the larger apples became adapted to dispersal by bears. The success of the apple's global travel was mainly due to the movement of people along trade routes, and crucially, due to the apple-loving horses on the Silk Road.

The book charts this geographical history of the apple and its influence on human civilisation. From Adam and Eve, to the ancient Egyptians, Romans, the Battle of Hastings and Newton's Law of Gravity, the apple has played a key role in human culture. Chapters also cover types of apple and apple crops, grafting techniques over time, archaeological discoveries, use as a food and in cider making, as well as the latest research in apple biology.

This is a long and thoughtful book by renowned botanical experts ... which will delight anyone who enjoys the more in-depth approach. *The English Garden*.

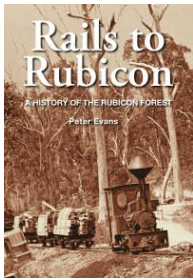
This is the ultimate accessible, academic apple volume. Alexandra Henton, *The Field*.

Barrie E. Juniper is Reader Emeritus in plant sciences at the University of Oxford; Emeritus Fellow of St Catherine's College, University of Oxford; and co-author of *The Tradescants' Orchard* (Bodleian Library, 2013) and *The Story of the Apple* (Timber Press, 2006).

David J. Mabberley is ex-Keeper of the Herbarium, Library, Art and Archives at the Royal Botanic Gardens, Kew, and is an Emeritus Fellow at Wadham College, Oxford, Adjunct Professor at Macquarie University, Sydney, and Professor Extraordinary at the University of Leiden, The Netherlands. He is a member of the Order of Australia (AM). He is the author of *Mabberley's Plant Book* (Cambridge University Press, 2017) and co-author of *The Story of the Apple* (Timber Press, 2006).

<https://shop.kew.org/the-extraordinary-story-of-the-apple>

Note: Thanks to the Australian branch of the International Society of Dendrology (IDS) for bringing this book to my attention. David Mabberley is a member of the IDS. It was mentioned in the June 2019 issue of its newsletter. As one IDS member commented "Does that man never sleep?"



Peter Evans, 2019. *Rails to Rubicon: A History of the Rubicon Forest*. 2nd edn. Light Railway Research Society of Australia, Surrey Hills, Victoria, 200 pp. ISBN 9780909340544.

From the publisher's notes.

This book was published by the LRRSA in 1994 and has been out of print for about 15 years. A second

edition is now available. It is a hard-cover book of A4 size with 200 pages and about 240 photographs and maps.

The book describes the 2 ft, 3 ft, and 3 ft 4½ in gauge tramways in Victoria's Rubicon forest, and the 2 ft gauge tramway which connected the forest with Alexandra railway station. The tramways were used for the timber industry and for a hydro-electricity scheme.

Only minor changes have been made to the text, but photographic reproduction has been greatly improved, and better quality paper is used. The maps are now in three colours with waterways in blue, and the rolling stock diagrams are now in colour. A few black and white photographs have been replaced with colour versions, and there are a couple of extra photographs. It includes a bibliography, references, and index.

It can be ordered from the LRRSA Online Shop at a cost of \$49.50 + postage - <https://shop.lrrsa.org.au>.

At the beginning of the twentieth century, the Rubicon Forest was acknowledged as containing some of the finest stands of timber in the state of Victoria. Due to the rugged terrain, little could be done to exploit the timber until an efficient and economical means of transport could be provided. Light railways, (or tramways), were commonly used to deliver timber from Victorian forests to the closest Government railway. The first timber tramway in the Rubicon Forest was completed in 1907, but terminated some distance from a railhead. The railway to Alexandra was opened in 1909 and, in 1912, the railway and forest tramway were connected by a steel-railed tramway. This link was the principal method of timber transport in the district until 1947 when competition from road transport forced its closure.

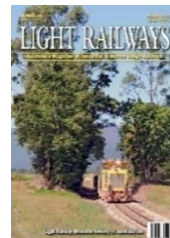
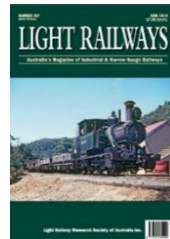
Rails to Rubicon tells the story of the sawmills and tramways of the Rubicon Forest. Around each mill was a cluster of houses. Keeping warm, dry and well fed was not as easy in the forest as it was in a rural township, and this book describes what it was like to live in one of these isolated settlements. Schools and facilities for entertainment had to be provided, often on steep hillsides miles from anywhere. Yet the inhabitants of the settlements led full and contented lives despite the dangerous nature of the work and the isolation and altitude of the mill settlements.

Although sawmilling forms the central theme of this book, it is not the only one. Forests provided a seasonal home to the Aboriginal people and to the pastoralists who followed and displaced them. Fire is a major theme in forest history and *Rails to Rubicon* describes the fire

practices of the graziers using the forest and the fire-exclusion policies of the forest managers who eventually forced them out. The utilisation of the water resources of the forest is also explored, and a chapter describes the historic Rubicon hydro-electric scheme.

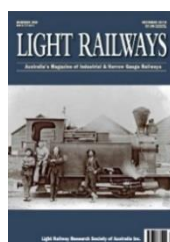
Light Railways: Australia's Magazine of Industrial & Narrow Gauge Railways, June 2019 (LR267), August 2019 (LR268), October 2019 (LR269) and December 2019 (LR270).

Light Railway Research Society of Australia.
ISSN 0727 8101. www.lrrsa.org.au.



While LR267 does not have any major articles on timber railways, it does include a short article on some changes to the locomotive collection at the Alexandra Timber Tramway and Museum, located 135km north-east of Melbourne. The changes include the arrival of an almost complete 1941 locomotive, and the move of Motor Rail Simplex 7351 to Sovereign Hill at Ballarat which, when restored, will be used to haul wood to the boiler house. More information at www.alexandratramway.org.au and www.sovereignhill.com.au.

LR267 also has a short article on the Walhalla Goldfields Railway, as does LR268, one of the rare issues of *Light Railways* not to include an article on a timber line. While not a timber line, the Walhalla Goldfields Railway is located the forests of the Yarra Ranges, in the Walhalla Heritage Area adjacent to the Baw Baw National Park. More info at www.walhallarail.com.au.

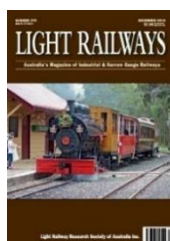


The "Looking Back" column of LR269 features two photographs taken during a trip to south-west WA in October 1966 to look at some of the remaining sawmills. The photographs were taken at the Bunnings Mill in Manjimp and are from the Weston Langford Railway Photography

Collection of 38,325 images. www.westonlangford.com

Also included is a short article on the Ida Bay Railway in Lune River, Tasmania, which is introducing a pedal and battery powered rail bike (noting that LR270 advised the opening had been delayed). "Passengers are invited to come to experience the pristine beauty of forestry, natural wild life and beach in the south of Tasmania, as well as to learn about the 100 years history of quarrying in the Ida Bay area of the Huon Valley."

www.idabayrailway.com.au.



In conjunction with the publication of *Rails to Rubicon*, LR270 includes a 4 page feature on the "Rubicon pioneers' picnic", published originally in December 1912, and accompanied with a postscript on the 2011 donation of photographs to the State Library of Victoria. The photos included many of forestry and sawmilling operations in the Rubicon Forest.