



# Newsletter No. 73 December 2017

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

# Pine Logging Operations at Pierces Creek, ACT, in 1961



The photo used on the cover of "Forest Capital: Canberra's foresters and forestry workers tell their story", published by the ACT Parks and Conservation Service, 2017.

Source: Archives ACT, photographer unknown.

See review p15.



Newsletter Editor: AFHS Address: Web: Fintán Ó Laighin PO Box 5128, KINGSTON ACT 2604 www.foresthistory.org.au Fintan.OLaighin@agriculture.gov.au

ISSN 1033-937 X



#### **MEMBERSHIP**

Membership of the Australian Forest History Society (AFHS) Inc is A\$25 a year for Australian and New Zealand addressees or A\$15 a year for students. For other overseas addressees, it is A\$30.

These prices do not include GST as the AFHS is not registered for paying or claiming GST. **Membership** expires on 30th June each year.

Payment can be made by cheque or money order, or through Electronic Funds Transfer.

Cheques or money orders should be made payable to the AFHS and sent to:

Australian Forest History Society Inc. PO Box 5128 KINGSTON ACT 2604

Electronic Funds Transfer can be paid into:

Commonwealth Savings Bank BSB 062 911

Account No: 1010 1753

Please also return this form if you pay by EFT or send an e-mail to the Treasurer advising that you have joined/renewed - Fintan.OLaighin@agriculture.gov.au.

Name:	
Address:	
Tel:	
Fax:	
E-mail	

Please mark the box if you would like a receipt otherwise an acknowledgment will be sent by e-mail.



#### **NEXT ISSUE**

The newsletter is published three times a year and the next issue should be out in April 2018.

# Input is always welcome.

Contributions can be sent to Fintan.OLaighin@agriculture.gov.au.

IN THIS ISSUE	
The 2017-18 Committee	
Cover Photo	
The 50th Anniversary of the Assessment of the Far South Coast forests near Eden, NSW 3	
The Australian Forestry Journal - Notes on Contents	
The Railway Sleeper - A Critical Element of Early East Coast Bush Society and Forest Management 6	
The 1217 Charter of the Forest	
Anniversaries	
A Root System Revelation 10	
Daniel May Wins Endeavour Research Fellowship	
Mary Sutherland, 1893-1955 12	
Dictionary of New Zealand Biography - Sutherland, Mary 12	
0 4 4 4 5 - 4 5 - 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	
New Zealand Journal of Forestry - Obituary: Miss Mary Sutherland	
New Zealand Journal of Forestry - Obituary:	

## **THE 2017-18 COMMITTEE**

The society's Annual General Meeting was held in Canberra on Tuesday 28th November 2017, and the following committee was appointed:

President: Sue Feary
Vice-President: Jane Lennon
Secretary: Kevin Frawley
Treasurer: Fintán Ó Laighin
Committee: Leith Davis
Peter Evans

Peter Evans Gerry Fahey Robert Onfray Rob Robinson

Public Officer: John Dargavel

# **COVER PHOTO**

The cover photo is one of six in a series showing pine logging operations at Pierces Creek, ACT, in 1961, posted by Archives ACT on its Flicker account at www.flickr.com/photos/archivesact/sets/721576155301 46428. The photo is used on the cover of a new book about the history of forestry in the ACT that was received shortly before our publication date. While a short review has been included in this issue, it doesn't do it justice and future issues of the newsletter will include summaries of the ten stories featured in the book.

As mentioned in the review, thanks to Neil Cooper of the ACT Parks and Conservation Service for the copy of the book. At the time he dropped it off, he wasn't sure how the book would be distributed, but he's happy to be contacted - Neil.Cooper@act.gov.au. He told me that there are plans for a second volume.



# THE 50TH ANNIVERSARY OF THE ASSESSMENT OF THE FAR SOUTH COAST FORESTS NEAR EDEN, NSW

By Terry Beath

### Introduction

August 2017 marked fifty years since the initial assessment of the forest resources around Eden was completed. This assessment led to the establishment of the fine forest industry around Eden that turned the sleepy little outpost into a centre for forest management and industry, and so grew the town into what it is today. The forests, local people, community and the State of NSW have benefitted enormously from the fifty years following that assessment in 1967.

A major adjunct industry also sprang up due to considerable opposition to anything to do with native forest harvesting. There were government enquiries in 1972, 1974, 1975 and, in a bumper year, 1977 which ended up with two enquiries. No doubt there have been minor skirmishes since then. The industry also commissioned a number of reports and statements, including a feasibility study in 1976 into the establishment of a bleached Kraft pulp mill locally (it wasn't a viable idea) and an EIS in 1977 for the Federal Government's export licence. Ah, wealth generation for some!

# A Slice of History?

In June 1967, I and two other trainees were sent to Eden to work with Forester Ken Traise, a new graduate himself, poor bloke - saddled with us! We were to carry out a comprehensive assessment of the timber resource in the Eden area prior to six consortia tendering for the pulpwood resource.

Eden was indeed a sleepy little outpost in those days. It had only been a few years before 1967 that the Princes Highway had been upgraded from Sydney to the Far South Coast. The sealed road surface still only extended a couple of kilometres to the south of Kiah (14 km south of Eden). The "highway" was then gravel surface from there down to the Victorian border and beyond. This upgrade led to the demise of the coastal shipping that had previously served ports in Eden, Merimbula, Tathra, Bermagui, Narooma and beyond to the north and eventually Sydney.

Although a quiet little town, there was often still plenty going on. Who could forget the Kiah Hall Ball of 1967? My first experience of a real country dance, where boozing seemed to replace the dancing. Or the wild nights at the Hotel Australasia when one of the local girls danced on the tables and showed off her red "witches' britches". A real substitute for television!

The Forester, Eden, at the time was Jim McIntosh. Jim had been a Sergeant-Major in WW2 and did his forestry qualification after being de-mobbed. He was a bit of a hard case and a real character. Jim used to refer to us three students as his "thoroughbreds" (among other things!). He seemed to have a lingering chariness of the Japanese after his military service experiences.

As we returned from the bush assessment work one day, we found a group of Japanese businessmen who were researching for their tendering in a misunderstanding with Jim. We had airphoto coverage of the entire area that we were using for our assessment and there was a second set of photos in the office. Jim must have had the office set of photos out for one of his tasks when the visitors arrived. He must have shown the photos to them and tried to explain we were using them to gather the resource assessment data. A misunderstanding had developed as the Japanese gentlemen (whose English skills weren't strong) apparently assumed Jim was offering them the photos to keep, when he only really was showing them that we had them and trying to explain how we were using them.

As we walked into the office, there was a tug-of-war with the photos in progress between Jim and the visitors. I think Jim got to the stage of "NO you can't have the bloody things, I was just showing them to you" or words to that effect. They were saying "thank you" bowing and trying to take them back.

Fortunately, an international incident was averted by our pretending that we needed to take the photos to the bush then and there. (Even though we had our own set.) Jack Henry, who was the Head Office manager of our assessment and in charge of the resource offering, arrived not long after. Ever the diplomat, Jack distracted all the parties and the Japan-Australia relationship survived.

In mid-1974 I was by then a forester at Bega and Jim was Forester at Nowra. When we met at a conference for the first time since Eden in 1967 the old hard case said: "I remember you. There were three of you ... the other two were nice fellows!" I think he was joking!

Eventually, in November 1967, Harris-Daishowa (Australia) Pty Ltd was born! Operations were licensed to commence in January 1968 and began in earnest in 1969. Jim was moved to calmer conditions with only local industries to deal with at Nowra Sub-District sometime around then and KO Smith (Keith Oscar) transferred to replace him. I believe Jim worked out his career in Nowra during the late 1970s.

The Forestry office of the NSW Forestry Commission in 1967 consisted of Jim McIntosh, Jim Douglas as office clerk and two bush foremen. Jack Worland and Joe (?) used to travel down from their homes around Bega each week to camp out all week in a tin hut about 32 kilometres south of Eden in Narrabarba. Ken Traise had been transferred there to lead the assessment. I don't recall an office assistant there at the time. It wasn't a big show.

The local forest industry consisted of three sawmills (from memory), Eden Sawmills Pty Ltd (on the site of the current Blue Marlin Motel), Duncan's Sawmill at the Palestine site next to the northern side of town and Ireland-Timms Forest Products Pty Ltd, on the southern side of the Eden town area. Timber volumes being harvested and sold in Eden Sub-District were quite small, as was the total annual royalty payment, hence the small office.



Invariably when I have worked in a small community, the local characters show up. Two canny blokes who made themselves known were Lloyd Cox and Vin Heffernan. Both were local entrepreneurs and had a finger in harvesting and haulage operations in the town. They regularly seemed to "just happen to be there" when we went to the pub after work and subtly and not-so subtly tried to get as much information from us as to the progress of the tendering and who might be involved so that they could lay some ground work to building a business relationship with them. Lloyd gave Ken Traise the nickname of "Trace-wire." With my later work on the Far South Coast I often encountered them as they ended up major harvesting and haulage contractors, still very much good blokes and local characters.

#### The Forests

The forests clearly showed that they had had a long history of major fires. The climate around Eden didn't have terribly distinct wet and dry seasons, and they experienced rainfall patterns that seemed quite random. The fire history meant that there were significant patches of regrowth of quite even age resulting from the fire events of long-gone days. There were large patches resulting from the 1926, 1939, 1952, 1954 and 1964 fires, and they were easy to pick out on the airphotos.

One strange occurrence we came across in a small gully was a complete stand of Silvertop Ash (*Eucalyptus sieberi*) all dead. They were possibly an even-aged stand resulting from the 1952 fires. It seemed that after the fire the Silvertop Ash on the ridges had been burned and threw their seeds far and wide. The seedling trees must have had some fifteen or so good seasons for growth before a very wet year meant that all the trees along the creek experienced waterlogging and pathogenic soil fungi such as *Phytophthora cinnamomi* fed on the roots and killed them. A demonstration of why most large *E. sieberi* trees existed on the ridges and not alongside creeks, unlike the Monkey Gum (*E. cypellocarpa*) and other species.

# Start-up of Operations

An unfortunate element of the early operations was that it was decided to harvest large blocks of forest at a time. Many of the common species sought for pulping had quite thick bark which was often coated with charcoal from the various fire events of their history. Charcoal is a no-no for making pulp and so trees had to be manually de-barked at the various log landings throughout the harvest compartment. The results were large landings with significant soil compaction, large heaps of bark and soil pushed into stacks around the landing edges. To make room to stack the sawlogs separately to the pulplogs, as well as give the men room to process the felled trees, meant that contractors needed to build very large landings. Visually it wasn't nice, particularly to those not used to the forest growth and harvesting cycles. Whereas foresters could envisage what the regenerated forest might be like, other visitors couldn't. The post-harvest state was what hit them and they assumed the worst. It was also the time of a great awakening about the environment throughout Australia and so fertile time for the "environmentalists" to flourish.

Despite all the controversies, bushfires, and other obstacles, the operations continue and the forests are considerably improved on their condition during 1967. The forest resource is still doing what forests do, that is, grow.

<u>Author's note</u>: I brushed up on some of the details of enquiries etc., by referring to Robert Bridges' "Brief History of the Forests, Forest Management, Fire and Conservation in South Eastern NSW". May 2005. Produced by Forests NSW, Southern Region, Eden, 2551. Bob went to Eden as Research Forester around 1970 and I suspect knows more about the forests and their management than anyone else!

# THE AUSTRALIAN FORESTRY JOURNAL - NOTES ON CONTENTS

By Ian Barnes

I've been blessed with a bound copy of some early editions of *The Australian Forestry Journal* (AFJ), including the first four of 1918. As readers may appreciate, this was a very important time, being the springboard for nation wide modern forestry in this country and some important names crop up. Once I started reading, I couldn't stop. But I decided I had to discipline myself into summarising what I was reading before the moments escaped. It is an important insight in to the forestry philosophy of the time. I can't help observe how some things have changed, but mostly things haven't, especially on the eternal difference, and sometimes conflict, of politicians' and foresters' planning horizons.

# Vol. 1 No. 1, January 1918

46 pages, edited by JW Niesigh, published quarterly by the Forestry Commission of NSW.

Editorial by NSW Minister for Lands and Forests, WG Ashford, highlighting the ignorance of the general public on the value of forests and forestry in Australia, and the intention of the AFJ to correct this.

WP Pope's notes on the vanishing brushwood forests of northern NSW. He refers to a twenty acre site in the Tweed valley, cleared, and being re-established to rainforest.

Reference to 100 Norfolk Island Pines sent by the NSW Forestry Commission to establish an avenue in Lorne to commemorate Victoria's role in the world war.

A plea for more wood waste utilisation for by products such as charcoal, wood alcohol and acetic acid.

Conservator of Forests in Western Australia, Mr CE Lane-Poole, describes a faster method of drying sawn karri using strips of one inch laths, thereby defeating the onslaught of fungus rot.

A request from the editor for readers to submit articles to AFJ. A "few hints" are presented and illustrate the purpose and clarity of future editions:

- \* Write plainly, not too closely together, and use one side only of the paper.
- \* Use simple language, and, as far as possible, avoid technicalities which inexpert readers will not understand. Do not flourish your scientific education by spraying your article with Latin or Aboriginal words they are all Greek to the printer, and are apt to dislocate the typesetting machine.

\* Above all, do not write a three-volume novel. The JOURNAL will only be published quarterly, and three months is too long a time to wait for the "continued in our next edition" part of the story. State your facts and your arguments as briefly as you can, and thus prevent risk of being "edited" into what you may think oblivion or worse.

Australian Forest History Society Inc.

Newsletter No. 73, December 2017

\* "... original and short articles and comments on articles already published are eagerly sought ..., which are cordially made available to the man in little Tasmania as they are to his fellow-forest-worker in Western Australia or any other State, or, for that matter, any other country".

Mr WAW de Beuzeville describes his 1916 treatise on increment curves in (NSW) Mountain Ash (now referred to as Alpine Ash).

A note on severe lerp infestation at Dungog. Mr NW Jolly, Director of Forests in Queensland, introduces a series of "Sylvicultural Notes on Forest Trees of Queensland", the first of which relates to Hoop Pine.

The then NSW Minister for Land and Forests, Mr WG Ashford, is quoted: "... after many years of political dallying with the (forestry) question, frequently interspersed with periods of absolute neglect ... One Government would proclaim its interest in the subject and appreciation of the importance of the timber industry, its successors would ignore the matter entirely or regard the recommendations and ambitions of forestry experts as a direct menace to programmes of land settlement. It was no wonder that, between the conflicting views of political administrators the Forestry Department became the sport of parties, and its officers, lacking the encouragement of even a possible continuity of system, were in the depths of discouragement more often than they were feeling optimistic. Happily, however, these conditions have changed, and, without a revocation by Parliament of the Forestry Act of 1916 which, of course, is hardly conceivable - they cannot recur."

An article on forest organisation and the importance of the working plan.

A short description of the role of the forest worker in the Western War Zone of Europe and includes the names of 27 staff from the NSW Forestry Commission, either killed, wounded, "injured" or still serving.

A reference to an *Indian Forester* article explaining the use of "Phenyle" in the destruction of diseases in plants.

A short article on the value of birds in insect control.

Casuarina stricta is recognised as a valuable fodder tree.

A British timber industrialist is not pessimistic on dwindling timber reserves, citing recent restrictions on cutting and the untapped reserves of Siberia and the Pacific Northwest.

A note on whether forests attract rainfall or rainfall develops forests.

A short description of a new tree felling machine - a "No. 2 tree-feller", powered by a portable 4hp boiler and capable of a two man operation.

The initiation of a demonstration forest at Inverell township.

Establishment of the first NSW prison reafforestation camp, a pine plantation at Tuncurry.

No doubt reflecting a time of materials shortage, an appeal to use more wood as a substitute for steel.

A two part article on the value of woodlots to private properties, and a description of new timber conservation laws relating to NSW leasehold lands.

A report on improved Murray River Red Gum timber resource as a result of government-sponsored relief work gangs thinning forests in the 1890s.

A lament on the clearing of the Big Scrub on the north coast of NSW.

Noting the NSW Government's purchase of two sawmills at Craven and Gloucester on the mid north coast

A report on the changing condition of the War Zone Forests, particularly of Belgium and northern France.

An explanation of how Australia's timber export market was affected by the shortage of shipping capacity, mainly due to the war.

A note on *Hipsipla robusta*, known in Australia as the Red Cedar Tip Moth, and its control.

A short report on the Fourth Australian Interstate Forestry Conference held in Perth, and its attendees.

A report on Australian hardwood tensile strength and fire resistance compared to imported woods.

Yale (USA) University's announcement establishing its Department of Tropical Forestry and promoting the potential importance of tropical forestry.

A note on the use of sawdust-cement flooring. Criticism of the Catholic College of Melbourne University's use of Japanese Oak in its construction. "The authorities responsible for this are not to be badgered; they are to be supremely pitied, and so is anyone when employing exotic architectural talent, expects an appreciation of anything other than exotic timbers. It is a pity that, as the architects and the timber of the country did not please the 'building committee,' they did not choose the soil of some other country on which to put their building."

Forest Assessor Julius' report on the timber resource of Nundle/Walcha.

An explanation of how Douglas Fir got its name and the considerable exploits of the Scotch gardener Mr David Douglas.

An explanation of the role of forests in conserving soil resource, including the threat of forest wildfire.

The contemporary introduction of another journal, Queensland's *Timberman and Ironmaster*, edited by Mr R Bedford MLC.

Mr E Julius' fictional (or maybe not) A Thief in the Night - a hilarious night time forestry camp incident involving a rival camp, a side of beef, and a revolver - recommended reading!

A description of Victoria's formation of the Australian Forest League, including its constitution.



# THE RAILWAY SLEEPER - A CRITICAL ELEMENT OF EARLY EAST COAST BUSH SOCIETY AND FOREST MANAGEMENT

By Ian Bevege

AFHS Newsletter No. 72 briefly featured my e-mail comments to Fintán Ó Laighin and colleagues about women timber cutters <sup>1</sup>, notably Irene King who with her sister Kath learnt the sleeper cutting trade from her father Enos Vickers around Orbost just after the First World War and who, during the 1930s, worked the lower south coast of NSW with her ex-Light Horseman husband Alf King. Then there were the four Lynch sisters - Nell, Mary, Kate and Rose - of Gympie Queensland, eldest of Cornelius and Ellen Lynch's 14 children, who cut hoop pine in the Mary Valley, Kilkivan and the Bunyas in the early 1900s; their story was briefly told in Newsletter No. 72, which also provides further references on the lives of these redoubtable women.

My comments were prompted by an article on Irene King by Robert Whiter <sup>2</sup> featured on-line at *ABC Open*. This article has been recently published within Robert Whiter's *Sleepercutting in Australia: When the chips are down* <sup>3</sup>; this book provides a very readable and insightful social history of the local industry on the far south coast of NSW and in eastern Gippsland, centred on Eden but extending from Moruya to Bombala and Orbost. A strength of this book is the extent to which the author has been able to incorporate primary sources from oral histories of those families closely involved.

In his Foreword to Whiter's book, Ross Dobbyns, now-retired Regional Forester at Eden and well known to many members of the AFHS, wrote, "Sleeper cutters came in all shapes and sizes, but the ability to cut a perfect sleeper was quite rare. Some cutters could produce sleepers looking like they had been planed & were perfect in shape and size". Sleeper cutters were arguably the largest single group of forest workers in the heyday of Australian railway construction from the mid-late 1800s into the 1930s; Robert Whiter lists 224 cutters' brands used in the Eden region alone while Ross Dobbyn suggested there were around 300 cutters licences operational in the district post World War 2.

Sleeper getting with hand tools - crosscut saw, broad axe, adze, maul, wedges and cant hook - was backbreaking work and the financial rewards meagre; forester Denis Christopher, quoted in Helen Hannah's Forest Giants 4, said, "The old way of cutting sleepers with a broad axe, that's gone. It's all sawn with mechanical saws now. Over the years it slowly changed, then it finished, thank God! It was a slave industry." Robert Whiter documents the efforts of William Veness of Eden for the period January-July 1912: William was regarded as a proficient cutter and over 129 working days he produced 1240 sleepers (each being 8 feet long with cross-section 9 inches by 4.5 inches) for which he received, after paying cartage and royalty, one shilling and ten pence half-penny (\$13 in 2016 5) per sleeper. His return averaged five pounds five shillings a week (equivalent to

\$750 in 2016, just half the average full time wage in that year of \$1516 °). As the cutters usually worked around 40 weeks a year 4, their annual wage was meagre indeed.

The sleeper inspection pass by railway inspectors or contractor's agents was a major hurdle for cutters because specifications were so tight; given the low return for effort it is little wonder that cutters would try to slip into a parcel the odd sleeper below specification or of an unacceptable low durability species. Philip MacMahon, in discussing sleeper species suitability of Blue Gum (Eucalyptus tereticornis) in his seminal Merchantable Timbers of Queensland 7, quotes Chief Engineer of Railways William Pagan, "With regard to Blue Gum ... I would be prepared to take this timber for sleepers, but for the fact that a great many timbers are called locally 'Blue Gum', and we have had very inferior timber being 'rung in' on us, and had to discontinue its use." Ringing in has even passed into folklore as epitomised by Henry Lawson's iconic short story "The Ironbark Chip" 8, first published in 1900, in which Dave Regan and his mates, preparing girders for a railway culvert, ring in a dud in place of the specified ironbark; the story revolves around the shenanigans they got up to in substituting the inspector's evidentiary chip from the dud with one from a genuine ironbark girder to avoid having their dud condemned with attendant monetary penalty.

Sleeper demand was not only high for the burgeoning Australian railway system but there was a healthy export trade as well, to such far flung places as South Africa, India, United Kingdom, China and New Zealand, mainly from NSW, Queensland and Western Australia. MacMahon 7 states that 294,000 sleepers (equivalent to 23,125 m<sup>3</sup>) were exported from Queensland through the port of Brisbane to India and South Africa in the 10 months between August 1904 and May 1905; Richard Dalrymple-Hay 9 reports the export in 1903 of 19 million super feet (44,854 m<sup>3</sup>) of sleepers to the value of £,163,258 (equivalent to over \$23 million in 2016). Export specifications were very tight, hence the strict inspection regime on the cutters, as rejects incurred significant costs all along the production and marketing chain. In NSW, inspectors from the Department of Public Works certified and branded sleepers for export 9; in Queensland, inspection and certification at lading was carried out by the Department of Railways on behalf of the forestry authorities, for which service a charge of one half-penny per sleeper was made. The effectiveness of this system is apparent as MacMahon states that, "so far as in known, not a single complaint has been, up to the present, made against any sleeper so passed." 7

Species preferences naturally favoured durable timbers; the data base was built up empirically based on the replacement history of sleepers in the earliest rail lines laid. In Queensland, data was available by 1903 from records of some nearly 800,000 sleepers on life expectancy 7: ironbarks *E. crebra* and *E. siderophloia* (21yr); turpentine *Syncarpia laurifolia* (syn *S. glomulifera*) (20yr); tallow-wood *E. microcorys* (18yr); spotted gum *E. maculata* and messmate *E. Stuartiana* (sic, misnamed in text, this is *E. cloeziana*) (16yr); grey gum (sic, Sydney blue gum)



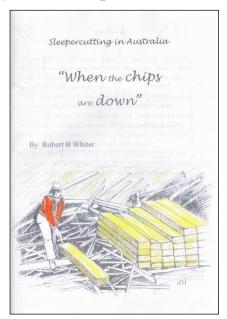
E. saligna, red bloodwood E. corymbosa (syn E. gummifera), red stringybark E. resinifera and bluegum (sic, forest red gum) E. tereticornis (15yr). Life expectancy in NSW was somewhat longer due to less harsh physical in-track conditions but also because of slightly larger cross-section dimension. Dalrymple-Hay 9 lists favoured species as ironbarks E. paniculata, E. siderophloia, E. crebra, E. sideroxylon (25yr); grey gums E. propingua and E. punctata (22yr); Murray red gum E. camaldulensis and tallow-wood E. microcorys (20yr); white stringybark E. eugenoides, white mahogany E. acmenoides and grey box E. hemiphloia (18yr); blackbutt E. pilularis and turpentine S. laurifolia (16yr). Robert Whiter records that species cut for sleepers 1900-1907 in the Eden-Moruya district were (my application of proper names): woollybutt (E. longifolia), blackbutt (E. pilularis), grey box (E. bosistoana), ironbark (E. paniculata and E. siderophloia) and grey gum (E. cypellocarpa).

There is a dearth of detailed descriptions of the sleeper production system and its social milieu in the literature. The two best formal accounts of the production system that I am aware of are Philip MacMahon 7 and Richard Dalrymple-Hay 9, both writing in 1905; Helen Hannah 4 addressed the social dimension well in her 1986 account. Cutters favoured logs of very large dimension as these vielded the most sleepers; Philip MacMahon details how cutters could mark out the maximum number of sleepers to be hewn from a solid log allowing for central pipe and the subsequent splitting out and dressing process. Production varied depending on size and quality of log; he states a fair average was 40 to 50 seven foot lengths or 25 to 40 nine footers from a single tree: "There are authentic cases of 85, 105 and 140 sleepers having been obtained from a single tree of Red Stringybark and Messmate". Output per cutter varied from five to 12 sleepers each day depending on sleeper size, log quality and skill. To quote Richard Dalrymple-Hay, "sleepers in this State are principally cut from hollow over-matured trees, the shells of which contain remarkably sound timber." Be that as it may, to quote Denis Christopher 4 again, "The sleeper cutters just went in and cut what they wanted ... They (i.e. the Forestry Commission) shifted me from Bermagui because I was too tough with the sleeper cutters. The trouble was the sleeper cutters were cutting these magnificent trees ... sawlogs. They had to ... It was a shame to see that much waste ... This was before and during the second world war." Helen Hannah 4 wrote that the Forestry Commission addressed the problem after the war by restricting sleeper getting to areas that had already been cut over for saw logs.

Robert Whiter's recent account <sup>3</sup> provides us with a very readable description of the sleeper production system, drawing freely on the material in the less readily accessible and elusive Dalrymple-Hay <sup>9</sup>. Additionally he provides us with excellent vignettes of the human story of the sleeper cutters as people, based on oral history interviews. His material is organised into twelve chapters covering the Early Days and Tools of Torture, through Species and Regulation to Families of the Forest. While essentially a local history, it is one from arguably the

most active forest production area historically on the NSW south coast, which has now morphed from saw log and sleeper production predominantly to wood chips based on what was historically a species of disfavour, coast ash (*E. sieberi*). This small A4 format soft cover book is available from the Eden Killer Whale Museum, 184 Imlay Street Eden NSW 2551 for \$15 plus postage. But be quick as I suspect the print run is not too large.

Editor's note: Copies can be ordered by phone and paid by credit card - (02) 6496 2094. Postage to Canberra was \$5.00.



# References

- 1. AFHS, 2017. Women Timber Cutters. Australian Forest History Society Newsletter No. 72, p4.
- 2. Robert Whiter, 2016. One in Twenty Thousand: the Remarkable Irene King. *ABC Open* 14 Dec 2016, https://open.abc.net.au/explore/166431
- 3. Robert B. Whiter, 2017. Sleepercutting in Australia: When the chips are down. Eden Killer Whale Museum, Eden NSW, 109pp.
- 4. Helen Hannah. 1986. Forest Giants: Timbergetting in the New South Wales Forests 1800-1950. Forestry Commission of New South Wales, Sydney, 120pp.
- 5. Reserve Bank of Australia. Pre-Decimal Inflation Calculator.

www.rba.gov.au/calculator/annualPreDecimal.html

- 6. Australian Bureau of Statistics. Average Salary Australia. www.livingin-australia.com/salaries-australia
- 7. Philip MacMahon, 1905. *The Merchantable Timbers of Queensland*. Government Printer, Brisbane, 68pp.
- 8. Henry Lawson, 1900. *The Ironbark Chip*. In *On the Track*. Angus and Robertson, Sydney, 157pp.
- 9. R. Dalrymple-Hay, 1905. Suitability of New South Wales Timbers for Railway Construction. Government Printer, Sydney, 15pp, illus +map.



# THE 1217 CHARTER OF THE FOREST

By Fintán Ó Laighin

The Charter of the Forest (Carta de Foresta) celebrated its 800th anniversary this year, having been issued in November 1217 during the reign of King Henry III of England. It is a companion document to the better known Magna Carta (Great Charter) of 1215. In fact, the term "Magna Carta" is used to distinguish that document from what is sometimes described as its smaller cousin.

In September 2017, the Lincoln Record Society in the UK, in association with Lincoln's Bishop Grosseteste University and the American Bar Association, convened a conference to commemorate the anniversary. It provided the following summary:

Lincoln Cathedral's copy of the first Charter of the Forest is one of only two surviving originals of that document, issued on 6 November 1217 in the name of King Henry III. It contains the forest clauses included in the 1215 Magna Carta forced upon his father King John, and others providing for forest administration and the rights and privileges of those dwelling within or near it. Its length meant that it was issued as a separate document from Magna Carta, although it was always closely associated with it. The two documents were thereafter confirmed and reissued together on many occasions. Copies of the Charter were distributed in early 1218, mainly as a preparation for the work to define the new forest boundaries which it had promised. Eight copies were sent to the sheriffs of the eight counties situated within the diocese of Lincoln. The only survivor is now deposited, with the Lincoln copy of the 1215 Magna Carta, in a new vault in Lincoln Castle.

The forest clauses in the Magna Carta related to the reform of forest law. The term "forest" had a broader meaning than it does now, and included large areas of heathland, grassland and wetlands, productive of food, grazing and other resources. Since the Norman invasion of 1066 when the concept of "royal forest" was introduced, increasing areas of land had been set aside where the king had hunting and fishing privileges and other uses were severely restricted, and punishments for transgressions could be severe. The royal forests expanded with each successive reign and by 1215 comprised about a third of the kingdom of England. Penalties imposed for forest offences were a major source of revenue for the king.

The original Magna Carta didn't last long before being annulled by Pope Innocent III in August 1215. He did this at the urging of King John who complained that it had been issued under duress. It was time where the Divine Right of Kings held sway. The pope wrote that the Magna Carta was "illegal, unjust, harmful to royal rights and shameful to the English people" and declared in null and void forever. In Latin of course.

The papal decree didn't quite win over the barons. Instead, they remained hostile and a civil war erupted. Some barons offered the English kingship to Prince Louis, the eldest son of the French king. He arrived (with an accompanying army) in May 1216 to

claim his throne and issued a proclamation which said nothing about Magna Carta. The civil war continued. By the time King John died in October 1216, Louis controlled over half the kingdom. John was replaced as king by his 9-year old son who ruled as Henry III. In November 1216, only a few weeks after John's death, Henry's regent, William Marshal, Earl of Pembroke, issued the first revision of the Magna Carta in an attempt to win back the support of the barons. It seemed to work, with the barons surrendering and the pretender to the throne sent packing after his army was defeated in May 1217 and his navy in August (he later ruled France as Louis VIII). A second revision was issued in November 1217. As David Carpenter writes:

When peace was finally declared later in the year, and Louis returned to France, the minority government redeemed its promises. In November 1217 they issued a second version of the Charter. For the first time it was now described as 'Magna Carta', Latin for 'The Great Charter'. This was in order to distinguish it from a second charter, smaller in size, known as the Charter of the Forest, which was issued simultaneously to govern the running of the royal forest.

In 1225, Henry III issued a further revision of the Magna Carta, this time under his own seal. This is considered the definitive version and also removed any questions of legitimacy as the new version made it clear that it was issued freely by the king, and not under pressure from the barons as had happened in 1215. A revised version of the forest charter was also included, and both documents were supported by the church. In fact, David Carpenter notes that "The Archbishop of Canterbury, Stephen Langton (1150-1228), issued a great sentence of excommunication against all those who contravened both Magna Carta and the Charter of the Forest."

The charters were subsequently confirmed by Henry's successor, Edward I, in 1297 and were added to the statute roll (i.e. the legislation passed by parliament). The importance of the forest charter is described in Wikipedia:

At a time when royal forests were the most important potential source of fuel for cooking, heating and industries such as charcoal burning, and of such hotly defended rights as pannage (pasture for their pigs), estover (collecting firewood), agistment (grazing), or turbary (cutting of turf for fuel), this charter was almost unique in providing a degree of economic protection for free men who used the forest to forage for food and to graze their animals. In contrast to Magna Carta, which dealt with the rights of barons, it restored to the common man some real rights, privileges and protections against the abuses of an encroaching aristocracy.

Mark Hill puts it even more forcefully:

It dealt with rights enjoyed by the common man rather than privileges of the barons, and did so far more meaningfully than the provisions of Magna Carta. It irrevocably altered English land law. It also



endured longer than Magna Carta, remaining in force until finally superseded by the *Wild Creatures and Forest Laws Act 1971*.

<u>Sources</u>: Much of this article is drawn from various articles on the British Library website, complemented by information the Lincoln Record Society and Wikipedia.

British Library, 28th July 2014. Timeline of Magna Carta: www.bl.uk/magna-carta/articles/timeline-of-magna-carta

British Library, 24th August 2015. Shameful and Demeaning: The Annulment of Magna Carta:

http://blogs.bl.uk/digitisedmanuscripts/2015/08/shameful-and-demeaning-the-annulment-of-magna-carta.html

David Carpenter, 13th March 2015. Revival and survival: reissuing Magna Carta. www.bl.uk/magna-

carta/articles/revival-and-survival-reissuing-magna-carta

Katherine Har, 9th May 2015. Magna Carta and the King's Forests. blogs.bl.uk/digitisedmanuscripts/2015/05/magnacarta-and-the-kings-forests.html

Mark Hill QC, 2015. The Charter of the Forest 1217: A Medieval Solution for a Post-Modern Problem? G20 Interfaith Summit, Istanbul, 16-18 November 2015.

www.iclrs.org/content/events/116/2377.pdf

Lincoln Record Society, 2017. The Lincoln Charter of the Forest Conference, 22-24 September 2017. www.lincoln-record-society.org.uk/wp-content/uploads/2017/08/Charter-of-the-Forest-Conference.pdf

National Archives (UK), nd. Charter of the Forest, 1225 (English translation and image).

www.nationalarchives.gov.uk/education/resources/magnacarta/charter-forest-1225-westminster

Wikipedia, nd. Charter of the Forest. https://en.wikipedia.org/wiki/Charter\_of\_the\_Forest

## **ANNIVERSARIES**

By Fintán Ó Laighin

In addition to the Charter of the Forest, this year has seen a number of anniversaries and it seems fitting to close the year with mention of a couple more.



Scion - 70 Years of Science (The New Zealand Forest Research Institute)

This year is Scion's 70th anniversary. Scion is the trading name for New Zealand Forest Research Institute Limited. Its head office and main campus is in Rotorua on a site that was once the headquarters for a forest nursery for a large government afforestation program. The nursery was established in 1898 at the edge of Whakarewarewa Forest where more than 60 exotic species were planted on 5000 hectares to determine which species grew best in New Zealand conditions.

Research commenced on the campus in 1947 as a government-owned Forest Experimental Station, which in 1949 was officially named FRI under the auspices of the New Zealand Forest Service. The FRI, and later Scion, would go on to become an internationally recognised leader in plantation forestry science.

The institute was established as a New Zealand Crown Research Institute in 1992. It is wholly owned by the government and constituted as a limited liability company under the New Zealand *Companies Act 1993*. In 2005 the trading name Scion was adopted to reflect the growth of research programs to include the

development of new materials and energy from renewable resources and waste streams.

Sources: Drawn from two articles on the Scion website - "Scion celebrates 70 years of science" www.scionresearch.com/about-us/news-and-events/news/2017/scion-celebrates-70-years-of-science and "Who we are - Short history of Scion" www.scionresearch.com/about-us/about-scion/who-we-are.



The National Forest Policy Statement: A New Focus for Australia's Forests - 1992-2017

The National Forest Policy Statement (NFPS) was endorsed by the Council of Australian Governments at its first meeting, held in Perth on

7th December 1992.

As stated in the meeting communique:

The Council, with the exception of Tasmania, agreed and signed the National Forest Policy Statement to ensure the ecologically sustainable development of a commercial timber industry in conjunction with the identification and retention of nature conservation reserves and wilderness areas. Tasmania has affirmed its commitment to the management of its forest resources as set out in the Tasmanian Forests and Forest Industry Strategy. (Editor's note: The Tasmanian Premier signed the NFPS in April 1995.)

The Statement is the response of the Commonwealth, State and Territory Governments to the Ecologically Sustainable Development Forest Use Working Group, Resource Assessment Commission Forest and Timber Inquiry and National Plantations Advisory Committee Reports.

The Council agreed on a range of policy measures aimed at enhancing the competitiveness of forest industries and reducing conflict over the use of Australia's forests. Of particular significance are the provisions in the Statement providing access to wood resources, the establishment of a National Research and Development Corporation and a National Advisory Body comprising industry, conservation, union and community interests.

Governments have also agreed to establish a process which will ensure a dedicated and secure nature conservation and wilderness reserve system that is comprehensive, adequate and representative. Codes of forest practice applying to all commercial uses of public native forests should ensure ecologically sustainable management, and States and Territories will encourage their adoption by private forest owners.

One of the practical outcomes of the NFPS was the signing of ten Regional Forest Agreements (RFAs) covering the major timber production areas in Australia, apart from south-east Queensland where the government opted not to sign the draft RFA. While the term "RFA" doesn't occur in the NFPS, there are a number of references to "Commonwealth-State regional agreement". The first RFA - for East Gippsland in Victoria - was signed on 3rd February 1997.



## A ROOT SYSTEM REVELATION

By Michael Bleby

Historic sites of past sawmills are no doubt scattered through forest landscapes everywhere. Even the pine plantations of South Australia are no exception. By the early 1900s the softwood plantings in the south east region were well under way and there is evidence of sawmills in various bush locations which were operating once logs of millable size were plentiful. These small mills eventually met their demise after the construction of more sizeable mills in towns, along with the mechanisation of log transport, centralisation, improved technology, scale of operation and so on.

Most of these former sawmill sites have long disappeared. All that remains at one such site at a location known as Flagrush Gully in the Mount Burr Forest Reserve is a large concrete block with metal mountings, some old wheels and odd bits of metal machinery parts. There is no trace of any buildings. One tell-tale sign of any past sawmill can be lasting quantities of accumulated sawdust, as prime evidence of milling activity.

The Flagrush Gully sawmill cut 8 foot softwood logs and was still operating during the 1940s, but ceased not long afterwards. The government-run Woods & Forests Department established the nearby Mount Burr sawmill in 1931 which may have contributed to the end of milling at Flagrush Gully. Incidentally, the name probably comes from the discovery of "Flag Rush" - a wetland plant that was known in the area.

It was after the devastating fires of Ash Wednesday (16th February 1983) that I was appointed to the Mount Burr District to take charge of extensive re-establishment over a 10-year program. The radiata pine plantation losses from that fire across the whole south east region amounted to some 20,000 ha.



Fire killed Pinus radiata plantation with regeneration.



Dense post fire Pinus radiata regeneration.

Massive clear falling salvage operations took place with logs being fed both into sawmills and into water storage (under sprinklers and into Lake Bonney). Other areas were gradually cleared to waste, burnt and scheduled for replanting, with site preparation and weed control plans.

One of the big challenges at the time was dealing with the "wheatfield" regeneration of pine seedlings that resulted from the germination of seed from masses of fire-affected pine cones. There were early decisions made after the fire that meant trying to manage any of this regeneration back into effective commercial forest was not the way to go, so ironically we devised various ways of killing - en masse - the very species we were trying to establish.



Herbicide-killed Pinus radiata regeneration.

The Flagrush Gully mill site had become plantation in 1959 when *Pinus radiata* was established, including trees planted all over an area of relatively deep residual sawdust that had remained. On the discovery of this site after the Ash Wednesday fire I was absolutely amazed.

The fire had completely burnt the layer of sawdust, which had the effect of lowering what had been ground level by 1 to 2 metres. It was like walking around underground among the excavated root systems of the forest. It was an astonishing insight into what root systems get up to. The most striking thing to me was the extent of the root fusion that was evident, linking up several groups of adjacent trees. Roots emerging from one tree went straight onto another. Some horizontal roots had strange right angle bends where an anchor root



was sent into the depths for some reason. Many of the larger roots were oval in cross section, which being beam shaped, would provide more lateral strength and stability.



Flagrush Gully 1984 - fire-killed Pinus radiata at age 24 - classic root fusion.



Flagrush Gully 1984 - fire-killed Pinus radiata at age 24 - joins & knee joints.



Flagrush Gully 1984 - fire-killed Pinus radiata at age 24 - exposed root systems.

There is no doubt that trees grow in response to swaying and their wind environment. I was reminded of the fascinating paper by Dr Max Jacobs concerning experiments on the effect of wind sway on trees which I learned about in my Forestry education days at ANU.

This demonstration of extensive root fusion provided another anecdotal answer to a common phenomenon I was used to - that of the pattern of tree deaths following

a lightning strike. There was always some dilemma about how many trees to take out when faced with salvage logging of a dying tree that had been struck by lightning.

In most circumstances, several trees surrounding the tree that had obviously been struck died at the same time or sometime later. An indicative strip of bark was usually blown off the tree that was struck. The question was always which ones were going to die, to save coming back for further salvage? The unseen below ground root fusion story was clearly part of the answer.

The forest on the former sawmill site was duly cleared and re-established in 1987 as part of the Ash Wednesday fire replant. What is there now will soon reach rotation age and be followed by yet another crop of softwood on the site.

I was inspired to tell this story, after discovering these images in my collection of forgotten forestry photographs. Sorting through old photos and digitising colour slides (mainly of family shots for posterity) leads to all sorts of professional memories!

# DANIEL MAY WINS ENDEAVOUR RESEARCH FELLOWSHIP

By Andrea Gaynor, Environmental History Network

Congratulations to ANZEHN member Daniel May\*, a PhD candidate with the Centre for Environmental History at ANU, who has won an Endeavour Research Fellowship that will support four months of research in the US from March-July next year, based at California State University (Chico, California) and the Forest History Society archives (Durham, North Carolina). This Fellowship will support the American dimensions of his PhD project on the politics of Indigenous burning and the mutual influence of understandings of Australian Aboriginal and Native American fire management in Australia and the Western United States. His trip will include presenting a poster at the American Society for Environmental History conference, visiting various archives on the West and East coasts, presenting a seminar at CSU Chico's anthropology forum, and meeting and discussing his work with leading figures in the field including Dr Don Hankins (CSU Chico) and Prof Stephen Pyne (Arizona State University). Daniel is particularly excited to be working with Dr Hankins, who stands at the forefront of the exciting new discipline of "pyrogeography", and has done comparative work between Aboriginal Australian and Native American fire management.

More information on the scholarships is available here: https://internationaleducation.gov.au/Endeavour%20pr ogram/Scholarships-and-Fellowships/Pages/default.aspx

This article was published by the Australian & New Zealand Environmental History Network on 23rd November 2017. See www.environmentalhistory-au-nz.org/2017/11/daniel-may-winsendeavour-research-fellowship.

<sup>\*</sup> Daniel May is also a member of the AFHS.

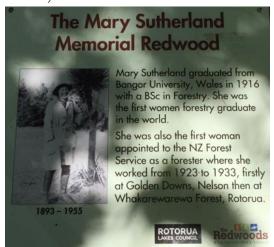


## MARY SUTHERLAND, 1893-1955

By Fintán Ó Laighin

A recent work trip to Rotorua, New Zealand, included a short walk in the Tokorangi Forest, also known as "The Redwoods", which forms part of the 5667 hectare Whakarewarewa Forest. Whakarewarewa is New Zealand's first exotic forest with the first plantings made in 1899. It has 170 exotic tree species. The Tokorangi and Whakarewarewa Forests are managed by the Rotorua District Council and Kaingaroa Timberlands for both recreation and timber production.

During the walk, our group came across "The Mary Sutherland Memorial Redwood", with the accompanying sign saying that she was the first woman forestry graduate in the world <sup>1</sup>, having graduated from Bangor University <sup>2</sup> in Wales in 1916. This seemed to have potential for an article in the newsletter, but it didn't take long to discover that AFHS member Mike Roche had written a short article on Mary Sutherland for the Dictionary of New Zealand Biography. The biography is reprinted with the permission of the author. Mike cites one of his sources as an obituary published in the New Zealand Journal of Forestry in 1954 (although she died in 1955) and this is included after his article.



The commemorative sign in The Redwoods. Apologies for the shadows of the trees obscuring some of the sign.

Photo: Penny Wells.

# DICTIONARY OF NEW ZEALAND BIOGRAPHY - SUTHERLAND, MARY

By Michael Roche 3

One of a family of five daughters, Mary Sutherland was born in London on 4 May 1893 to Nellie Miller Sutherland and her husband, David Sutherland, a medical wine manufacturer. Four of the sisters pursued careers: two in teaching, one in medicine, and Mary in forestry.

After attending the City of London School for Girls from 1908 to 1912, Mary took courses in agriculture and forestry at the University College of North Wales, Bangor, from 1912 to 1916, and became the first woman in the United Kingdom to complete a BSc in forestry. Subsequently, she served in the Women's Land Army and worked as a forester on estates in Renfrewshire and Inverness-shire. In 1917 she took up a position as assistant experimental officer with the Forestry Commission. However, in 1922 her career hopes were unexpectedly dashed when Sir Eric Geddes's Committee on National Expenditure made recommendations that led to retrenchment and the loss of her position.

A State Forest Service had been established in New Zealand in 1921, with Canadian-trained forester L. M. Ellis as director. Mary Sutherland was attracted to New Zealand because she felt it offered forestry conditions similar to those in the United Kingdom. She was made a forestry assistant in 1923, the first, and for many years the only, woman appointed to a professional grade in the newly established service. Her position became permanent in 1925. By this time, in order to overcome a predicted timber famine, the government had committed itself to establishing 300,000 acres of plantation forest within a decade.

Sutherland was the most junior of the few professionally qualified foresters, although two men were younger - one of whom was less qualified; in 1926 her salary was £320. Her botanical knowledge and professionalism were acknowledged, but under-used during this dramatic period of forestry development. Unable to share a tent with male staff, she was seldom sent on field work as other accommodation had to be paid for. As a consequence, she was mostly employed on technical calculations for volume tables and in time-consuming microscope work. In 1924 she had spent time in Rotorua compiling information on plantations and nurseries in the area. In 1929 she began a detailed investigation for a paper entitled 'A microscopical study of the structure of the leaves of the genus pinus', which was published in the Transactions and Proceedings of the New Zealand Institute in

Although her skills were not fully utilised, Mary Sutherland did important technical and planning work during the 1920s afforestation boom and her professional commitment to forestry did not waver. In 1924 she had become a member of the Empire Forestry Association; in 1928 she was a charter-member of the

<sup>&</sup>lt;sup>1</sup> An entry on Wikipedia https://en.wikipedia.org/wiki/Mary\_Sutherland\_(forester) says that she was the first forester in the UK and the British Empire, sourcing the claim to the Dictionary of New Zealand Biography (DNZB). The DNZB, however, says that she was the first in the UK https://teara.govt.nz/en/biographies/4s58/sutherland-mary. While none of these claims contradict each other, the fact that the DNZB page limits her achievement to the UK suggests that there may have been a woman elsewhere in the world who graduated as a forester before her.

<sup>&</sup>lt;sup>2</sup> At the time she graduated, the university was known as the University College of North Wales, its name from 1884-1996 when it was became the University of Wales, Bangor.

<sup>&</sup>lt;sup>3</sup> Michael Roche. Sutherland, Mary, Dictionary of New Zealand Biography, first published in 1998. Te Ara - the Encyclopedia of New Zealand, https://teara.govt.nz/en/biographies/4s58/sutherland-mary. All text licensed under the Creative Commons Attribution-NonCommercial 3.0 New Zealand Licence (http://creativecommons.org/licenses/by-nc/3.0/nz/deed.en). Commercial re-use may be allowed on request. All non-text content is subject to specific conditions. © Crown Copyright.



New Zealand Institute of Foresters, and in the same year she was elected a fellow of the Society of Foresters of Great Britain. She served on the Council of the New Zealand Institute of Foresters in 1935 and was vice president from 1940 to 1941. Her drawing of a sprig of fruiting rimu was adopted as the emblem for the institute's official seal. She also served on the Council of the New Zealand Forestry League in 1936.

The National Expenditure Commission in 1932 recommended a sizeable reduction in State Forest Service expenditure and Mary Sutherland again found herself unemployed. However, in 1933 she secured a position at the Dominion Museum, Wellington, and remained there until 1946. Initially working as a clerk, she was eventually reclassified as a botanist. She presented a paper at the Pacific Science Congress in 1933.

Mary Sutherland maintained a wide range of interests through her involvement with the Society for the Oversea Settlement of British Women and the New Zealand Federation of University Women, of which she was Wellington branch secretary from 1935 to 1937. During the Second World War she served as assistant superintendent of the YWCA hostel at Woburn, which catered for 300 young women.

The most important part of her professional career still lay ahead. This began in 1946 when Sutherland transferred to the Department of Agriculture as the sole farm forestry officer, on a salary of £460. She was charged with extensive work on farm-shelter plantations and woodlots, a role particularly suited to her early training in agriculture as well as forestry. She was also responsible for the layout of plantations at the Winchmore Irrigation and Invermay Agricultural Research Stations. Vigorous and forthright, wearing knee boots and jacket, she cut a distinctive figure in the field. Between 1947 and 1949 she wrote an important series of articles for the New Zealand Journal of Agriculture on the potential benefits of planting trees on farms, which formed the basis of a 1951 Department of Agriculture bulletin on homestead shelter planting. In 1950 she contributed a chapter, 'Native vegetation', to the department's publication Farming in New Zealand. In 1952 Mary Sutherland visited forests in Britain, Denmark, Norway, Canada and the United States. Her job required considerable travel, but was rewarding in allowing her the opportunity to encourage farmers to rethink old attitudes, especially about forests as a land use in direct conflict with pastoral agriculture. It was on one such field excursion to Central Otago in March 1954 that Sutherland became ill with a kidney condition, which abruptly ended her working career and directly contributed to her death a year later on 11 March 1955 in Wellington. She had never married.

Mary Sutherland's early career had parallels with the first women foresters in the United States Forest Service. Had she not encountered prejudice within the State Forest Service, her career could have been much more significant. Ultimately, the farm forestry work was probably her most important contribution because of the way it helped reshape attitudes towards land use and break down barriers between farmers and foresters.

### External links and sources

Halkett, John, Peter Berg and Brian Mackrell. *Tree People. Forest Service Memoirs*. New Zealand Forestry Corporation, Wellington 1991.

Macdonald, Charlotte, Merimeri Penfold and Bridget Williams (eds), 1991. *The Book of New Zealand Women*. Bridget Williams Books Ltd ,Wellington.

Anon, 1954. Obituary: Miss Mary Sutherland. New Zealand Journal of Forestry Vol. 7, No 1: 8 (Editor's note: The reference to 1954 is correct, even though she died in 1955.)

# NEW ZEALAND JOURNAL OF FORESTRY - OBITUARY: MISS MARY SUTHERLAND \*

It is with profound regret that we record the death of Miss Mary Sutherland in Wellington on March 11, 1955. Miss Sutherland was one of the Charter Members of the Institute and a strong and faithful supporter since its formation in 1928. She became ill while on duty in Central Otago in March, 1954, and had been unable to carry on her work ever since. At the time of her death Miss Sutherland was farm forestry officer of the New Zealand Department of Agriculture.

Miss Sutherland was educated at the City of London School for Girls and the University College of North Wales, Bangor, where she took a B.Sc. degree in Forestry.

During the First World War she served in the Women's National Land Army in Britain. Later she was forewoman forester in estates in Renfrewshire and Inverness-shire. She also served as an assistant experimental officer with the British Forestry Commission.

Miss Sutherland was appointed to the New Zealand Forest Service in 1925. She served as a forest assistant in Wellington and Rotorua. From 1933 to 1936 she was a member of the staff of the Dominion Museum, but rejoined the Forest Service in 1937 as botanist. In 1946 she was seconded to the Department of Agriculture to fill the new position of farm forestry officer. In this capacity she was responsible for the layout of plantations at the Department's Winchmore Irrigation Research Station and Invermay Agricultural Research Station.

Miss Sutherland's special interest was the encouragement of farm tree planting. In the New Zealand Journal of Agriculture her many articles on farm forestry did much to promote this extension work. She was also the author of a bulletin "Homestead Shelter Planting."

Miss Sutherland was appointed a Fellow of the Society of Foresters of Great Britain in 1928.

During the Second World War Miss Sutherland was assistant superintendent of the hostel at Woburn which was managed by the Y.W.C.A. for the Government and catered for 300 girls.

\* Copyright in this article is owned by the New Zealand Institute of Forestry Inc. (NZIF). It is taken from the NZIF website which advises that "material with an original publication date greater than three years old may be reproduced free of charge in any format or media without requiring specific permission". All copies of the journal from 1937 to 2014 are available for free download from http://nzif.org.nz/issues.php. More recent issues are available for NZIF members.



## **NEW BOOKS AND PUBLICATIONS**



John C. Kerin, 2017. The way I saw it; the way it was: The making of national agricultural and natural resource management policy. Analysis & Policy Observatory. No ISBN. 717pp. www.apo.org.au/node/76216 (free download).

Review by Fintán Ó Laighin.

This is a lengthy tome that provides

some interesting and entertaining insights from John Kerin, Australia's second-longest serving minister for primary industries (Minister for Primary Industry from March 1983-July 1987 and Minister for Primary Industries and Energy from July 1987-June 1991). At just shy of 81/4 years, he is exceeded only by the Country Party's Charles Adermann who was Minister for Primary Industry for almost nine years.

(December 1958-October 1967).

A member of the Hawke and Keating Cabinets, Kerin's portfolio also included forestry, and Chapter 15 (pp485-54) is specifically on this matter. He sets the tone early on when he recounts that:

... of all the industries I had to deal with, first as Minister for Primary Industry and then as Minister for Primary Industries and Energy, forestry, particularly forestry in Tasmania, was played in the least rational, most emotional and most political of ways. Facts simply did not count nor could cut through the hype of the purists, the unrealistic and many environmentalists. It was a clash of ideology and politics and pragmatism and of wilful ignorance versus science. It was a clash of passions between trees and jobs in a parlous employment state and the price was truth, honesty, light - and jobs. There was - and is - enormous ignorance about sustainable forestry, which is not the contradiction in terms many automatically conclude it to be. But up against the Wilderness Society/Greens -Tasmania and its trees were the genesis of the Greens and the media which loved a brawl and whipped it all up into an unnecessary frenzy, and eventually a minister who played it all for the votes, common sense could not prevail. Jobs and reputations were made, and unmade in the process, seats won and lost. To log or not to log in Tasmania, and the economic fallout, is an issue which determined certain parliamentary seats in Tasmania - then and now.

His frustration is palpable, even after almost 30 years. The chapter covers a lot of ground, starting with an account of his experience working in the bush, a discussion of the policy and the policy challenges that arose, an explanation of the forest estate, forestry issues prior to the election of the ALP government in 1983, the rise of community awareness, a discussion on woodchips, a discussion on Tasmania, an account of the never-ending battle over Australia's forests, a proposed pulp mill at Wesley Vale in northern Tasmania, and concludes with a section on the "Ecologically Sustainable Development Process and the Resource Assessment Commission".

The book serves as both a personal and political memoir, and includes chapters on growing up in the 1940s and '50s, getting involved in community and politics, working for the Australian Government's Bureau of Agricultural Economics (part of the portfolio of which he was later to be minister), and his early experience of entering parliament and being a backbencher. It includes separate chapters of many of Australia's agricultural commodities - wool, dairy and sugar for example. It concludes with observations in a chapter titled "Politics and policy and what I learned".

He intersperses his text with occasional asides and observations, including that "By the time I was 17 I could swing an axe all day but, contrary to the perceptions of some, I have never participated in wood chopping competitions" (p34) and, musing on his election, that he "thought it an accident, if not slightly ridiculous, that someone from my background, could be elected to Parliament. From what I could gather, I was the first 'professional' axeman, brick setter and chicken-plucker ever to have been elected - and there have been none since" (p84). He includes a photo of himself, undated but presumably taken when he was a minister, with the caption "As Patron of the Axeman's Hall of Fame, I thought I should see if I could still swing an axe. By now, I could have earned the nickname of 'Lightning'- couldn't strike in the same place twice."



As mentioned, he also discusses other sectors that he was involved in. While I won't dwell on them here, I do like his introductory quote at the start of chapter 16 on "Natural resources: land and water":

"Anyone who believes exponential growth can go on forever in a finite world is either a madman or an economist". Kenneth Boulding, economist and systems scientist, 1996.

This book is an entertaining read, certainly worthy of some attention.

If I can conclude with a personal comment, I joined John Kerin's department as a graduate in March 1988. One of my early jobs was to set up a room where he would be launching something or other. By the time he arrived, the dignitaries had assembled and were being introduced to Mr Kerin. While that was being done, the two of us who had set up the room stood quietly at the back. The minister saw us, said something like "what about these people?" and pushed his way through to shake our hands. That was my first contact with a minister. At the time, I didn't think much of it, other than it showed he was polite and courteous. I have since come to realise that this is <u>not</u> typical behaviour for a minister. It left a good impression.





David Mabberley, Mel Gooding & Joe Studholme, 2017.

Joseph Banks' Florilegium: Botanical Treasures from Cook's First Voyage.

Thames & Hudson Ltd.

ISBN 9780500519363. 175 colour illustrations. Hardback 320pp.

\$120.

From the publisher's notes.

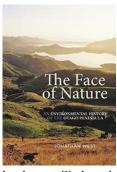
Joseph Banks accompanied

Captain Cook on his first voyage round the world from 1768 to 1771. A gifted and wealthy young naturalist, Banks collected exotic flora from Madeira, Brazil, Tierra del Fuego, the Society Islands, New Zealand, Australia and Java, bringing back over 1,300 species that had never been seen or studied by Europeans. On his return, Banks commissioned over 700 superlative engravings between 1772 and 1784. Known collectively as Banks' Florilegium, they are some of the most precise and exquisite examples of botanical illustration ever created.

The Florilegium was never printed in Banks' lifetime, and it was not until 1990 that a complete set in colour was issued in a boxed edition (limited to 100 copies) under the direction of the British Museum. It is from these prints that the present selection is made, directed by David Mabberley, who has provided expert botanical commentaries, with additional texts, setting the works in context as a perfect conjunction of nature, science and art.

www.thamesandhudsonaustralia.com/product-page/joseph-banks-florilegium

\*\*\*\*



Jonathan West, 2017. The Face of Nature: An environmental history of the Otago Peninsula. Otago University Press, Dunedin. ISBN 9781927322383. 388pp.

From the publisher's notes.

Bounded by the wild waves of the Pacific on the east, and the more sheltered harbour on the west, the Otago Peninsula is a remarkable

landscape. Today a habitat for a diverse array of wildlife including albatrosses, penguins and seals, the Peninsula has undergone dramatic changes since it first attracted human settlement.

An important new book by Jonathan West, *The Face of Nature: An environmental history of the Otago Peninsula*, explores what people and place made of one another from the arrival of the first Polynesians until the end of the nineteenth century.

The Peninsula has always been an important place for Māori, who have retained land that remains at the core of their history in the region. However, most of the landscape was transformed by 19th century British settlers from native forest into small farms that fed a booming Dunedin, at the time New Zealand's leading commercial city.

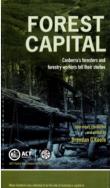
'The rapid environmental change led to many negative impacts as well,' says West, 'including loss of habitat for birds, dramatic erosion and eruptions of pests and weeds.'

Natural scientist and historian George Malcolm Thomson reflected in 1901 that in just fifty years, 'the whole face of nature is altered.'

West's beautiful book incorporates a rich array of maps, paintings and photographs to illustrate the making - and unmaking - of this unique landscape. In doing so it illustrates why the Otago Peninsula is an ideal location through which to understand the larger environmental history of these islands.

www.otago.ac.nz/press/books/otago667151.html

\*\*\*\*





Brendan O'Keefe (ed), 2017. Forest Capital: Canberra's foresters and forestry workers tell their stories. ACT Parks and Conservation Service. ISBN 9780646978512. Paperback 392pp.

Review by Fintán Ó Laighin.

The history of this book is almost as interesting as the book itself. It originated from a series of ten video interviews conducted by Brendan O'Keefe in the mid-1990s, a project instigated by the then head of ACT Forests (and current member of the AFHS), Graham McKenzie Smith. The videos were lost as a result of the massive fires that hit the ACT in January 2003, destroying 500 houses and 60 per cent of the ACT's plantation estate. As noted

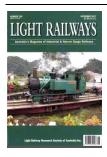
by Neil Cooper in his introduction, the "vast majority of ACT Forests' historical records and photographs were also destroyed when these fires swept through the main Stromlo office". These records included the original video recordings. However, in 2016, transcripts of the interviews were discovered during a routine clean up of another office, and it is from these transcripts that Brendan O'Keefe has compiled this volume.

As mentioned, ten interviews were conducted, some with well-known figures such as Lindsay Pryor and Tony Fearnside, but also Italian migrants Attilio Padovan and Frank Rosin, foresters Ron Murray, Ian Gordon, Bob Cruttwell and Terry Connolly, and forest workers/overseers Harold Tuson and Bill Bates who between them had almost 80 years working for ACT Forests. The span of history covered by the interviews ranges from the 1920s to the 1990s.

Future issues of the newsletter will include summaries of the stories.

Thanks to Neil Cooper, ACT Parks and Conservation Service, for the copy of the book.





Light Railways: Australia's Magazine of Industrial & Narrow Gauge Railways, December 2017. Light Railway Research Society of Australia. ISSN 0727-8101. www.lrrsa.org.au. Review by Fintán Ó Laighin.

One of the two feature articles in this issue is titled "The Buyers locomotive and its successors", by Mark and

Angela Fry, condensed from the first volume of their book, On Splintered Rails - The Era of the Tasmanian Bush Loco, which was released in late 2017. The story starts in 1870-71 with the establishment of a sawmill beside the Esperance River in southern Tasmania, and the construction of an accompanying timber tramway. Subsequent extensions to the tramway meant that by 1911, the practicalities of a steam locomotive had become apparent. As the authors note, "The locomotive that eventuated was to be one unique for Tasmanian logging tramways and it would become known as 'The Buyers locomotive", taking its name from the Hobart engineering firm, AB Buyers. It was used from 1912 until 1934 when it was replaced by the first of its five successors. The line operated until two severe floods in 1954 destroyed all the tramway bridges. The text of the article focusses primarily on the design and engineering of the various locomotives, nicely complemented by drawings, designs and sketches of various layouts and configurations.

Also included is Tony Sedawie's field report on Anderson's timber tramway in Marysville, one of the last two tramways to operate in Victoria, and an article by Iain Stuart on the merits of various GPS applications, which have become a very useful tool for field work.

The LRRSA has also established a Facebook page that is open to both members and non-members. www.facebook.com/groups/LightRailwaysAustralia. It mentions that Ian Barnes used the site to help identify a photo he found in the May 1920 issue of the *Australian Forestry Journal*.

\*\*\*\*



Dorothy Kass, 2017. Educational Reform and Environmental Concern: A History of School Nature Study in Australia. Routledge. ISBN 9781138650510. 232pp.

From the publisher's notes.

A crucial component of the New Education reform movement, nature study was introduced to elementary

schools throughout the English-speaking world in the late nineteenth and early twentieth centuries. Despite the undoubted enthusiasm with which educators regarded nature study, and the ambitious aims envisioned for teaching it, little scholarly attention has been paid to the subject and the legacy that nature study bequeathed to later curricular developments. Educational Reform and Environmental Concern explores the theories that supported nature study, as well as its definitions, aims, how it was

introduced to curricula and its practice in the classroom, by focusing upon educational reform in the Australian state of New South Wales.

www.routledge.com/Educational-Reform-and-Environmental-Concern-A-History-of-School-Nature/Kass/p/book/9781138650510



# AUSTRALIAN HISTORICAL ASSOCIATION CONFERENCE

Canberra, 2nd to 6th July 2018

http://history.cass.anu.edu.au/aha2018 and http://history.cass.anu.edu.au/aha2018/streams

## Call for papers

Historians make choices about the scale of their inquiry. They set parameters for their projects - temporal, geographical, social, archival - which shape their research strategies, their potential audiences, and their interpretations and arguments.

We engage with scale in a variety of ways, including: big history, microhistory, global history, local history, deep history, planetary history, biography, emotions, digital history and big data, and document analysis.

Do you write history on a grand or intimate scale? Or both?

Join us at the 2018 AHA conference in Canberra to ponder these questions and more! We welcome paper and panel proposals on any geographical area, time period, or field of history, especially those relating to the theme of scale.

Reflecting the location of the conference in Canberra, we also invite papers on the theme History and the National Cultural Collections which promote engagement between historians and professionals in the GLAMs sector (galleries, libraries, archives, museums).

As is customary, AHA members and affiliated societies will organise various specialised streams. Details will be added to this call for papers as they become available.

## Green stream

<u>Convenors</u>: Professor Tom Griffiths (ANU) and Dr Julie McIntyre (Newcastle)

The Green Stream is running for the third time this AHA after successful ventures at Ballarat (2016) and Newcastle (2017). It features environmental history - the sort of history which includes nature as an agent, not just background to the historical story, and ranges widely across urban and regional histories, disasters, the inland and the sea, and political and environmental activism. The conference theme of 'The Scale of History' lends itself to special scrutiny by environmental historians who have to work across different dimensions of time and space. In Canberra, in addition to normal papers, we are hoping to generate a series of joint forums that will cross streams (for example, Scales of History: from the Local to the Planetary; Australian History in the Great Acceleration; Museums and the Anthropocene).