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LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways

Light Railway Research Society of Australia Inc.

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Imperial to metric conversions:

1 inch (in)	25.40 millimetres
1 foot (ft)	0.30 metre
1 yard (yd)	0.91 metre
1 chain	20.11 metres
1 mile	1.60 kilometres
1 ton	1.01 tonnes
1 pound (lb)	0.454 kilogram
1 acre	0.4 hectare
1 horsepower (hp)	746 Watts
1 gallon	4.536 litres
1 cubic yard	0.765 cubic metres
1 super foot (sawn timber)	0.00236 cubic metre

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Editorial

Welcome to a bonus 48-page edition of *Light Railways.* The Editors decided that as there was quite a lot of material on hand, and in particular several excellent photos of the Queensland Sugar cane locomotives completing yet another crushing season, we could expand the magazine as a bonus for our readers to help them celebrate the 2014 Christmas season.

As lead articles we have another excellent contribution from J L N Southern Award winner Ian McNeill on the Woolgoolga Tramways, an article to celebrate the return to service of the locomotive *Homebush*, and the first part of a series of articles by Mike McCarthy on the tramways of South Gippsland.

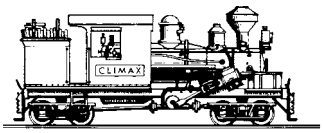
Readers will also notice that we have introduced a new feature of the magazine titled "Looking Back" where we feature two historic photos of light railway interest from across Australia and provide extended captions to highlight the items of interest. This edition we feature two photographs from Tasmania.

All of this, together with our usual features on Field Reports, Industrial Railway News, Research, Heritage and Tourist, and Letters to the Editor, make for fascinating reading.

We trust you enjoy it.

The Editorial Team and the LRRSA Council wish all our readers a very Merry Christmas and a prosperous 2015. *Richard Warwick*

Front Cover: *Lautoka Mill's 13* CHILLI *hauls a train of empties on the fringe of the mangroves heading north at Tavarau on the line to Rarawai Mill. The 0-6-0DH locomotive is EM Baldwin 9442.1 4.81 of 1981 rebuilt by Ontrak in Sydney (2435-1 of 2009) and was recently transferred from Labasa Mill. Photo: John Browning*



Light Railway Research Society of Australia Inc. A14384U
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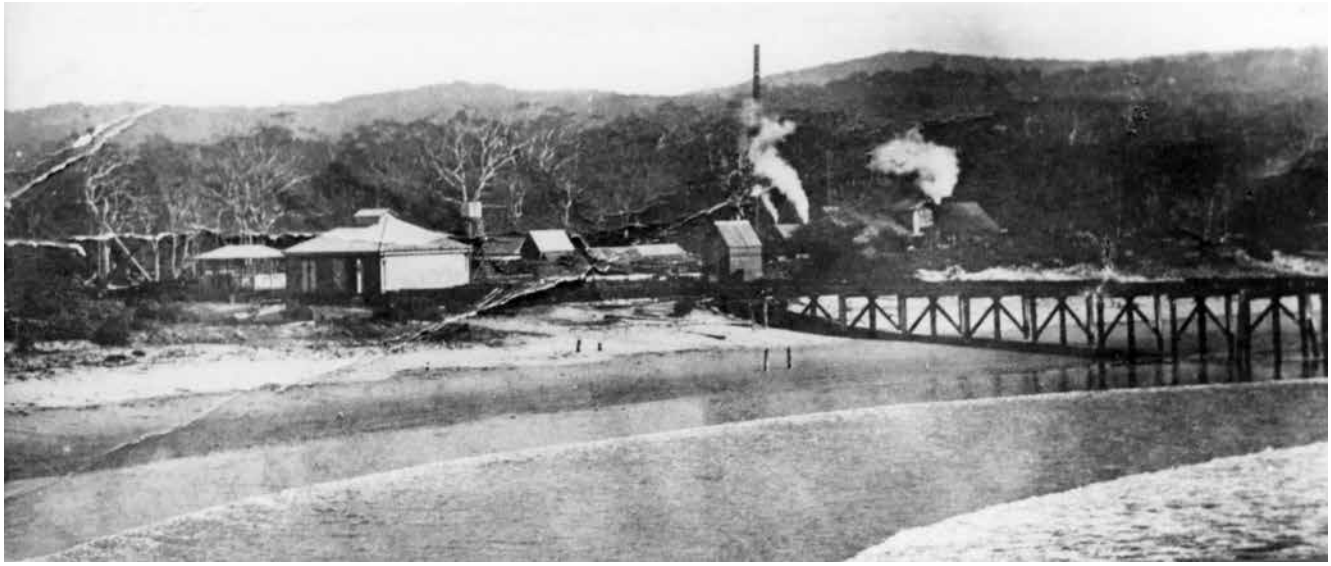
The Light Railway Research Society of Australia Inc. was formed in 1961 and caters for those interested in all facets of industrial, private, tourist and narrow gauge railways in this country and its offshore territories, past and present.

Members are actively involved in researching light railways in libraries and archives, interviewing knowledgeable first-hand participants and undertaking field work at industrial sites and in forests.

Articles, letters and photographs of historical and current interest are welcome. Contributions should be double spaced if typed or written. Electronic formats accepted in the common standards.



The BATCo's Jetty Sawmill was situated beside Woolgoolga's ocean jetty. A short siding connected the mill to the 3ft 6in gauge tramway which ran the length of the jetty to a steam crane at its outer end. The mill's sawn and hewn timber products were loaded onto 4-wheel flat trucks and horse-hauled out to the crane to be loaded onto coastal steamers. *Photo: Neal Yates collection*

The British Australian Timber Company Limited
Part 2 – Woolgoolga

by Ian McNeil

Foreword

Part 1 of the history of the British Australian Timber Company Limited appeared in LR 238, the August 2014 issue of *Light Railways*. It covered the setting up of the Company by Dalgety & Co, and the history of its sawmilling and timber tramway enterprise at Coffs Harbour. Part 2 in this issue relates the parallel story of the Company's other main sawmill and timber tramway venture at nearby Woolgoolga.

Introduction

Woolgoolga is a medium-sized town on the NSW North Coast, 25km north of the city of Coffs Harbour. It is a popular tourist destination best known today for its beaches, banana plantations and iconic Sikh Temple.

White settlement came late in the piece to Woolgoolga, and didn't really get underway until the 1870's. There was little good agricultural land to attract settlers, and access by land and sea was difficult. The first settlers tried their hands at growing sugar cane, but soon turned their attention to the district's real wealth – its magnificent forests. Virgin stands of blackbutt, ironbark, flooded gum, mahogany, tallowwood and grey gum grew in abundance. But early development was hampered by the need to barge or float timber from Woolgoolga beach out to vessels anchored off-shore. It was a risky procedure suitable only for high-value softwoods such as pine and red cedar.

The NSW Colonial Government of the day was successfully lobbied to provide an ocean jetty to develop the timber industry and encourage settlement. After a two year construction period, Woolgoolga Jetty was opened for business in February 1892 at a cost of £13,200.[1] It was 1560 feet long and was equipped with a 5-ton steam crane at the outer end and a single-track 3ft 6in gauge tramway running its length.

Early hardwood exports consisted mostly of logs and hewn timber – girders, piles and railway sleepers – for city and overseas markets. The sawn timber market was slow to develop, partly because Woolgoolga's ocean jetty was an open roadstead and exposed to the elements. In bad weather trading ships often bypassed Woolgoolga in favour of the better sheltered Coffs Harbour. When they did call, they gave first preference to logs and hewn timber, which were faster and easier to load than sawn timber.

The BATCo's Woolgoolga Jetty Sawmill

The British Australia Timber Company Limited (BATCo) was set up in August 1906 by Dalgety and Co, a large and successful Australian pastoral company.[2] The new Company set up its head office at 15 Bent Street, Sydney and established a timber yard at the foot of Johnston Street, Annandale, on the Rozelle Bay waterfront. It commenced operations in November 1906 by purchasing sawmills in Coffs Harbour and Woolgoolga from the North Coast Steam Navigation Company (NCSNCo).[3]

The BATCo's Woolgoolga purchase was the Lion Sawmill, a small mill just behind Woolgoolga Beach, about 100 metres north of the ocean jetty. It had been put in by George Wallace Nicoll, a Sydney shipping line owner, in 1898 to cut hardwood timber to fill his export contracts.[4] He created it by combining machinery from two smaller mills – one up on the Tweed River and the other at nearby Corindi – to produce a cutting capacity of 30,000 super feet per week. It depended on bullock teams for its log supply and thus tended to operate in fits and starts.

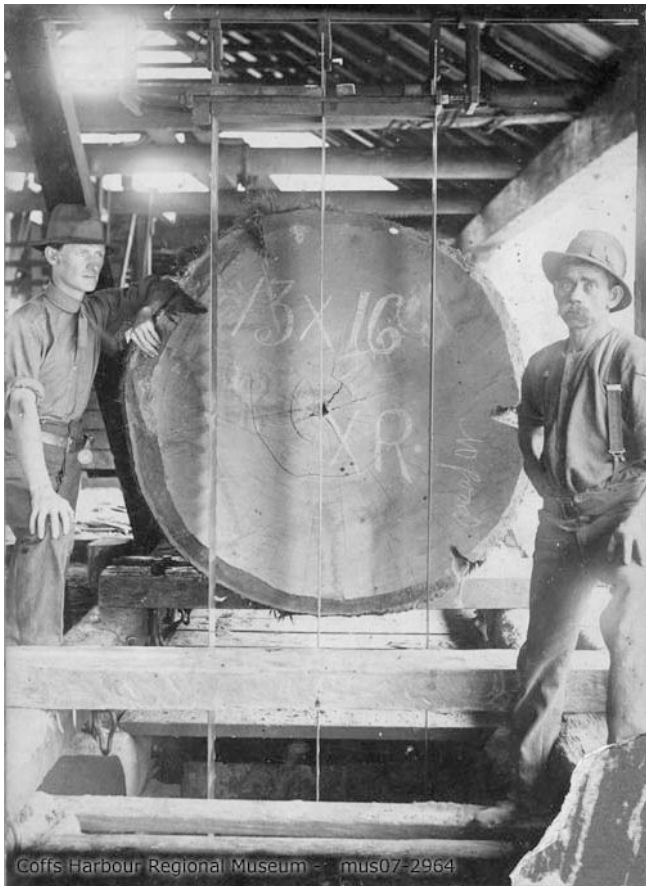
Nicoll unfortunately developed locomotor ataxia, a degenerative disease of the nervous system, in his mid-50s. Worsening ill-health saw him sell his shipping line and business interests to the North Coast Steam Navigation Company (NCSNCo) in April 1905.[5] He passed away in November 1906.[6]

The NCSNCo's main reason for buying Nicoll's shipping line was to consolidate its position as the premier shipping line on the NSW North Coast. Nicoll's two sawmills, one at Coffs Harbour and the other at Woolgoolga, were part of the purchase deal but the NCSNCo showed little appetite for running them. It did carry out a preparatory overhaul of the Lion Sawmill and applied for a Special Lease (1905-27 Grafton) to put in a short tramway to connect the mill to the jetty tramway.[7]

Workmen installing the horizontal bull wheel at the top of the tramway incline in 1908. The ½ mile 1 in 5 incline was gravity operated, with descending loaded timber trucks hauling empty trucks up hill. The earth platform that supported the bull wheel was still visible in 2014. Photo: Neal Yates collection

But it was probably with a sense of relief that the NCSNCo accepted the BATCo's offer to take the two sawmills off its hands.

The BATCo began shipping in mill machinery soon after the purchase to increase the sawmill's cutting capacity to over 100,000 superfeet of timber per week. The plant was comprehensively rebuilt and equipped with a larger boiler, mill engine and a big vertical frame saw. This frame saw was said to be one of the largest in the State and was capable of breaking down blackbutt logs over 6ft in diameter. For a short while in 1909 the pressure of business was so great that the mill worked double shifts to keep pace. 'Lux' acetylene lights illuminated the mill for the night shift. Big log dumps lined the tramway approaches and equally large stacks of sawn timber jammed the mill yard and the approaches to the jetty.



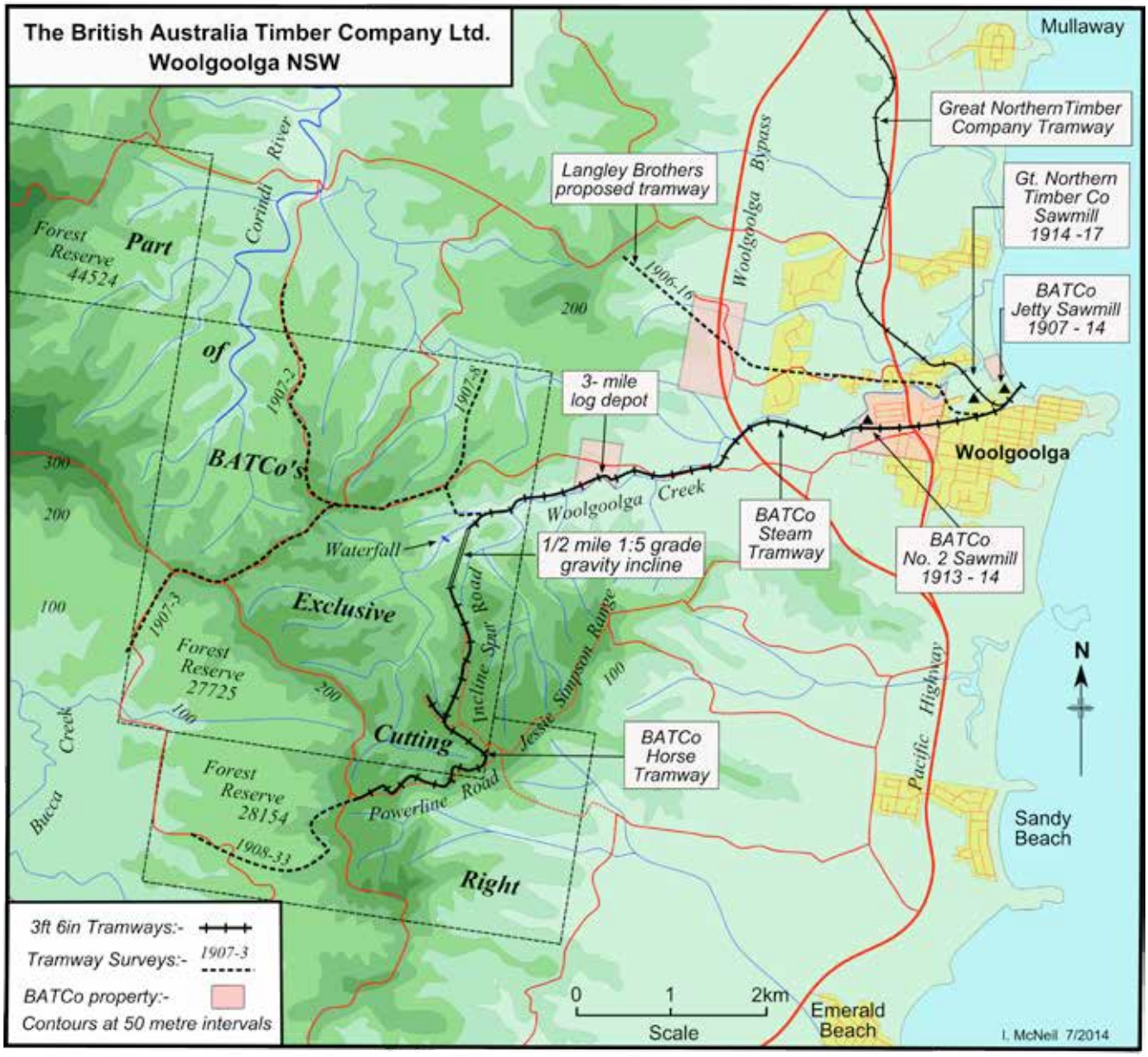
The BATCo's district manager Alexander McKay (left) stands next to the vertical frame saw inside the Woolgoolga Jetty sawmill. He was the driving force behind the Company's acquisition of Exclusive Cutting Rights, and went on to have an eventful career as a forestry expert in Australia and overseas. Photo: Coffs Harbour Library collection

A short siding connected the mill to the jetty tramway. Sawn timber was loaded onto flat trucks and horse-hauled to the steam crane at the outer end of Woolgoolga Jetty. There it was lowered into the holds of small coastal steamers for the trip to Sydney. This was a skilled and often risky operation when steamers were pitching and rolling alongside the jetty in rough weather. Three scheduled cargo steamers called in at Woolgoolga each week to load timber, supplemented by vessels chartered by the BATCo from time to time to clear backlogs.

In late 1910, BATCo's managing director Mr Nash informed the Dorrigo Council shire engineer that the company intended to put in a 10-chain tramway along the Esplanade to carry away waste timber and sawdust from the Jetty Sawmill. To do this the BATCo applied for and was granted Special Lease 1910-45 Grafton for 5 acres of land just north of the Jetty Sawmill and a short connecting tramway to it.[8] This exercise was apparently in response to complaints about smoke from burning sawdust blowing into nearby residences. A certain Mrs Young had become so incensed over her curtains and hangings being destroyed by smoke, that she successfully badgered the Council into putting the Company on notice to take steps to abate the nuisance. However it seems the Company did not proceed with the project – it took the cheaper option and purchased the lady's property instead.

The BATCo's logging tramway

The Woolgoolga district contained a wealth of hardwood eucalypts – blackbutt, flooded gum, mahogany, ironbark and tallowwood eucalypts being the main species. Good timber on the narrow coastal plain had been well and truly picked over by teamsters by the time the BATCo arrived. Virgin stands were still abundant on the steep slopes and in the narrow valleys of the nearby coast range but access was much more difficult.



Preparations for a steel-railed 3ft 6in gauge logging tramway to access virgin stands of timber up in the nearby coastal range began in November 1906. The Company lodged an application for Special Lease 1906-17 Grafton with the Bellingen Land Board to construct a line from the jetty up into the forest.[9] It was at this point that a conflict of interest arose between the BATCo and the firm of Langley Brothers. The Langleys operated a fleet of coasters which served Coffs Harbour, Woolgoolga and the Tweed River. They shipped large quantities of railway sleepers, pine logs, hardwood logs, girders and piles down to Sydney.

For reasons best known to themselves the Langleys lodged a competing application for a tramway at the same time. Both companies laid claim to the same 1½ mile strip of land beside Beach Street to Woolgoolga Creek, that being the most practical route leaving the jetty. In December 1906 the Bellingen Land Board held a hearing to decide the matter. Mill manager Charles Dorrough stated that the BATCo had already purchased a sawmill and had landed sufficient rails at Woolgoolga to construct 4 miles of tramway. More rails were coming to hand at a rate of 50 tons per week. He estimated the line would cost £8,000 and would be up and running within 6 months of permission being granted.[10]

The Board decided in the BATCo's favour whereupon the Langleys withdrew the conflicting part of their application and applied for a deviated route. They were granted a 15-year tramway lease (1906-16 Grafton) but they did nothing with it and the lease was declared forfeit a year later.

The BATCo's Special Lease 1906-17 Grafton for its tramway was approved in July 1907.[11] The 4½ mile route connected end-on with the jetty tramway and ran west through Woolgoolga village beside Beach Street. It crossed the main Coffs Harbour–Grafton road (now the Pacific Highway), went along Moore Street then continued west to the south bank of Woolgoolga Creek. It followed this creek into a narrowing gorge up to a railhead near the base of a 30 metre high waterfall.

While the Company was waiting for its tramway lease to be approved, steel rails continued to arrive by cargo steamer. By the beginning of March 1907 a stockpile of 700 tons had been accumulated. Some of this was left stacked on the jetty and attracted the ire of the Navigation Department which was responsible for its operation and maintenance. Faced with the need to replace 40 jetty piles the Department learnt that the BATCo and other shippers had also been using the jetty to store large quantities of export timber, some of it being left there for months.[12] A directive was issued banning this practice which was overloading the jetty structure.

All the early timber tramways in Woolgoolga connected to the town's ocean jetty. Local roads were so bad that all sawn and hewn timber was shipped out, firstly by sailing ships, later by small coastal steamers. But nearby Coffs Harbour had better and safer shipping infrastructure, and by the beginning of World War II Woolgoolga's coastal timber trade had virtually finished. The derelict jetty was demolished in 1955.

Later the Department relented and permitted temporary storage of export timber cargoes on the jetty a day or two before steamers were due but that was all.

Finally in June 1907 the Company received permission to begin constructing its 3ft 6in gauge steel-railed tramway. An advertisement in the local paper gave notice of its intentions:

"*Wanted, fifty men for Woolgoolga Tramline. Navvy work and axemen. Taken on Monday next. Apply Woolgoolga Office, British Australian Timber Company.*"[13]

By the end of July plate-laying had progressed along the north side of Beach Street to the main road, and earthworks had been completed for a further two miles up Woolgoolga Creek. The newly-arrived locomotive was put to work hauling rails from the jetty stacks to the advancing railhead. By the end of August 1907 the tramway had reached the first log depot at the 3-mile, and the locomotive had begun to make three to four return trips a day with logs for the mill. A few weeks later the tramway was at the 4½-mile railhead near the foot of the waterfall, having criss-crossed Woolgoolga Creek four times in the last half-mile.

The waterfall railhead was hemmed in by steep ridges and a cliff. Further extension up the creek by ordinary means was not possible. The Company's surveyors initially pegged out an incline up the right hand (north) ridge, with ridge-top branch-lines extending to the Corindi River to the north and Bucca Creek to the west. The long Bucca Creek branch had another incline pegged out at the end to take the line down into Bucca Creek valley. Special Leases 1907-2 Grafton, 1907-3 Grafton and 1907-8 Grafton were granted for these proposed extensions.[14]

But in mid-July 1907 there was a change of plans. The BATCo applied to the Minister for Lands for an exemption from the operation of ordinary timber licences over 1000 acres of forest encompassing the headwaters of Woolgoolga

Creek and its tributaries above the waterfall.[15] In other words, no other licenced timber cutters would be able to cut that timber; it was reserved for the Company. This was a marked departure from normal practice, under which anyone with an inexpensive timber cutter's licence could cut timber anywhere on Crown Lands as long as they paid the required royalty. Strenuous objections were raised by local cutters and teamsters who saw it as a threat to their livelihoods. The Woolgoolga Progress Association also protested but to no avail; the Minister granted the exemption in early 1908.[16]

The exempted area - the headwaters of Woolgoolga Creek above the waterfall – lay to the south of the railhead and would not be accessible from the planned north-side tramway branch lines. Accordingly these leases were abandoned and allowed to lapse. In their place the Company started work on an incline up the side of the left-hand (south) ridge to the top of the Jessie Simpson Range. The Lands Dept approved Special Lease 1907-23 Grafton of 2 acres for the incline in December 1907.[17] It was finished by January 1908 with the local newspaper commenting that "*the rise up the mountain is a fine piece of work*."[18]

The ½-mile gravity incline raised the line up some 150 metres with an average gradient of 1 in 5. There was a large horizontal bull-wheel at the top. Descending loaded log bogies hauled empty log bogies up the incline, crossing at the half-way point where a passing loop was installed. Unfortunately no details of the incline have come to hand to show how descending loads were braked. There was a short siding at the base to shunt the locomotive out of the way while log bogies were hitched onto the wire and vice versa.

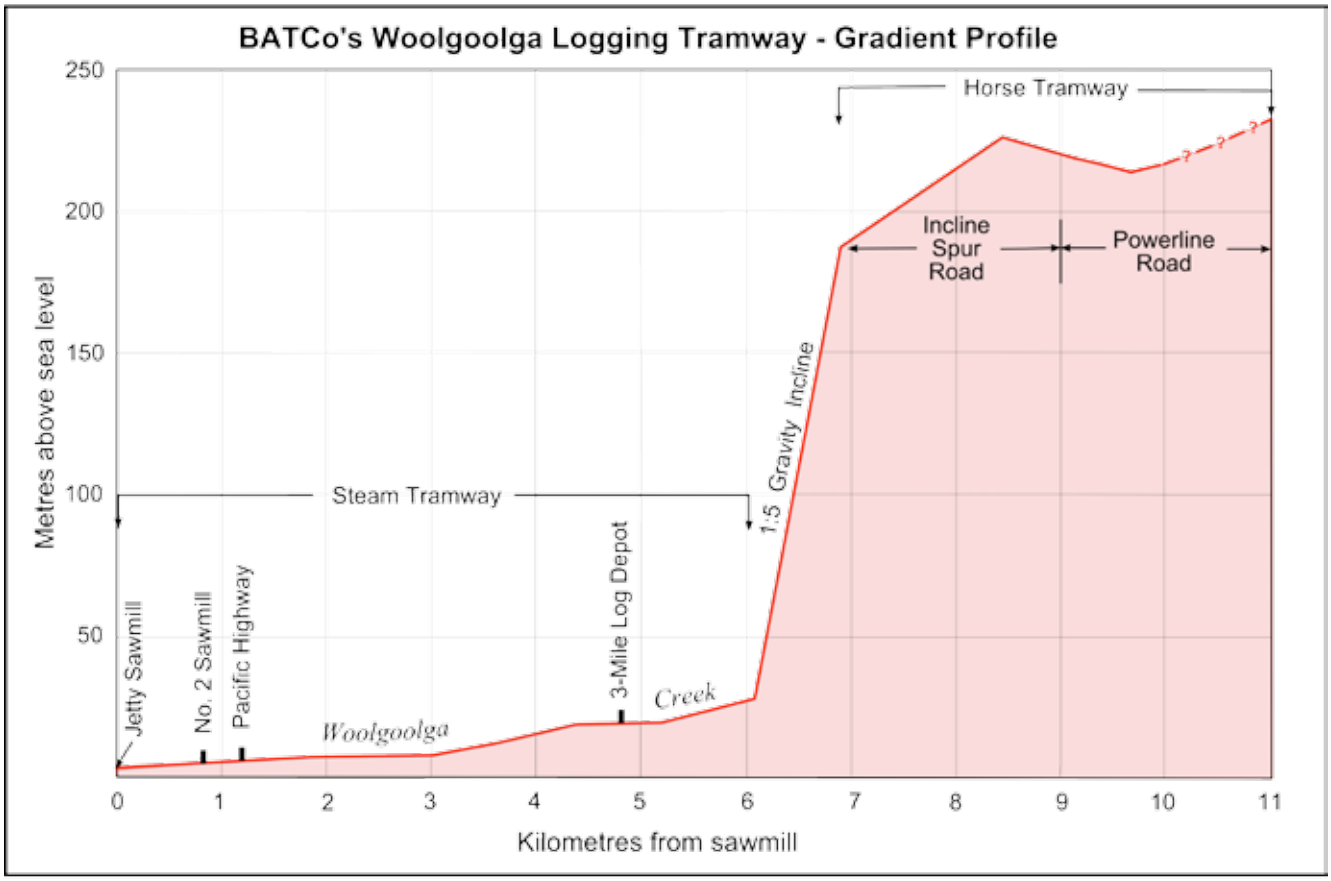
At the top of the incline the tramway followed the ridge line south and then west, paralleling the present-day Incline Spur and Powerline forestry roads. Special Lease 1908-33 Grafton[19] granted the Company permission to extend this ridge-top line all the way to Bucca Creek though only some three miles of it were actually constructed. Plans to run a locomotive on the ridge tramway came to nothing and horse teams provided all the motive power during the life of the line.

The BATCo's Murray & Paterson steam locomotive

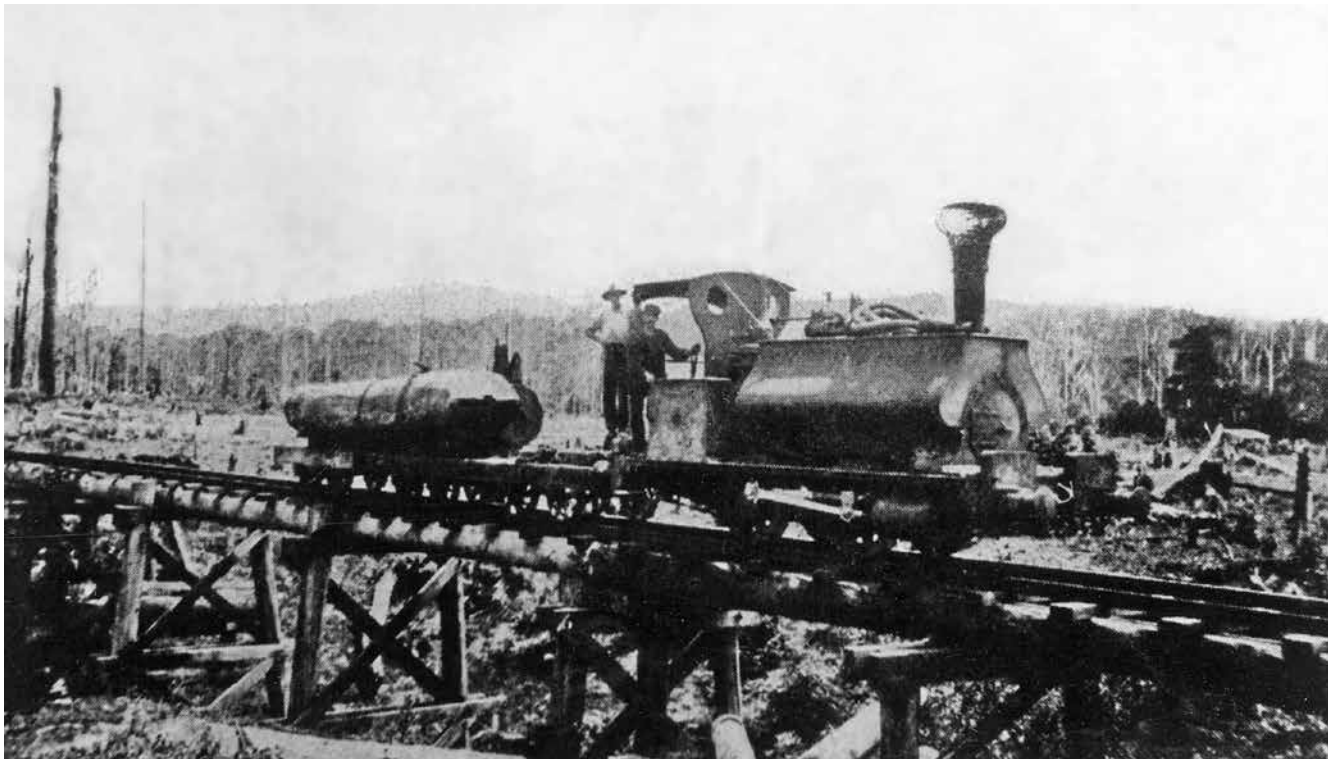
To operate its tramway the BATCo acquired a second-hand 12-ton steam locomotive from Queensland. This was Murray & Paterson 205 of 1886, a 3ft 6in gauge 0-4-0ST fitted with 9 inch cylinders and a reverse-curved saddle tank, similar in shape to Andrew Barclay locomotives of similar vintage.[20]

No. 205 was one of only two locomotives built by Messrs Murray and Paterson of Coatbridge, Scotland, and it went to Lewis Thomas' Aberdare Colliery at Blackstone near Ipswich in Queensland. There it was used to haul coal wagons over Thomas' private 2-mile railway to the Government line at Bundamba Railway Station. The Government took over Thomas' line on 1 January 1897 and was offered his locomotive as well. The offer was not taken up and the locomotive remained idle for several years just south of Blackstone, accessible to young boys who played in the cab. On 29 July 1902 the engine was inspected because motive power was needed for Townsville Jetty but it was found to be unsuitable. At that time it was reported that there was no lagging or ash-pan, the regulator was stiff and it had been left exposed at all times.[21]

Four years later it was acquired by the BATCo, probably through the agency of Dalgety & Co who had representatives in many parts of Australia. The locomotive was unloaded at Woolgoolga Jetty on 13 July 1907.[22] At this stage it is not known what happened to the locomotive between 1902 and 1907;



The BATCo's 3ft 6in gauge logging tramway was steel-railed, but only the first six kilometres on easy grades beside Woolgoolga Creek to the base of the gravity incline was steam-hauled. The remaining section above the incline was operated by horse team. Locomotive haulage was considered at one stage but World War I intervened before the line could be extended far enough to make the extra expense worthwhile.



The only known photograph of the BATCo's Murray and Paterson 0-4-0ST locomotive (205 of 1886) on the company's 3ft 6in gauge Woolgoolga timber tramway. The basic timber trestle bridge is probably one of the bridges constructed to criss-cross the line over Woolgoolga Creek on the way up to the base of the gravity incline. *Photo: Bruce Macdonald collection*

whether it continued to languish unwanted at Blackstone, or whether it found use with a contractor putting in one of the sections of the QR North Coast Railway. It appears that the Murray and Paterson was put in running order prior to shipment to Woolgoolga, as it was put to work almost immediately on the tramway, hauling rails out to the extending railhead.

The BATCo's sole locomotive driver was Ernie Rogers who came to Woolgoolga from England in 1906. He had a block of land beside the tramway on Woolgoolga Creek, and the locomotive was stabled in an engine shed straddling the main line between his house and the creek. Ernie also operated the steam cranes on Woolgoolga Jetty between times and was renowned for his extremely colourful turn of phrase when holidaying tourists got too close to loading operations.

After the line was completed, the locomotive's primary role was to haul logs from the foot of the gravity incline to the Woolgoolga sawmill. Upon arrival at the base of the incline, the locomotive ran into a short siding, thus enabling empty log bogies to be hooked to the endless wire rope and hauled up by descending loaded bogies. There were no adverse grades on the return trip and the locomotive could manage up to 18 logs at a time to the mill. Local oral history tells of spirited runs back to the mill after dark with sparks flying up from the wheels. The locomotive did not haul sawn timber from the BATCo's mill the short distance to the jetty; this task was done by heavy draught horses.

The BATCo shut down its Woolgoolga operations in September 1914 and advertised the plant for sale in November 1916.[23] There were no buyers for the locomotive at the auction. Two years later, in July 1918, it was acquired by Hepburn McKenzie for the timber tramway associated with his Fraser Island operation in Queensland.[24] The venture was a commercial failure, and after McKenzie died in August 1925 the assets were auctioned off. Mr W Skillington of Pialba purchased the locomotive and loaded it onto a punt for the trip to the mainland. According to one report it fell off the punt in heavy seas and had to be retrieved.

The Queensland Forestry Department, which had been singularly unsupportive of McKenzie's operation, then performed a remarkable about face and decided to retain the timber tramway on Fraser Island. It re-purchased the locomotive from Skillington and continued to operate the tramway until 1935. Nothing further is known of No. 205 and presumably it was scrapped on Fraser Island.

The BATCo's Woolgoolga operations

Logs for the BATCo's jetty sawmill were supplied from the Company's tramway and supplemented by purchases from independent bullock teamsters. From the start though it was company policy to secure control over its cutting areas. First it was successful in gaining the aforesaid Ministerial exemption over 1000 acres within Forest Reserve 27725 in the headwaters of Woolgoolga Creek in early 1908.[25]

The passing of the NSW Forestry Act 1909 provided the company with a much greater opportunity to control its supplies. Section 15 of the Act allowed for the granting of Exclusive Rights up to 10,000 acres for up to 15 years over forest areas where timber-getting could not be carried out without heavy expenditure. It was designed to protect individuals and companies who invested in sawmills and timber tramways from unscrupulous individuals cutting timber for miles along tramway routes and then blackmailing the owners. This sort of thing had happened along the Wootton Timber Tramway, firstly to the Australian Timber Export Company and latterly to Allen Taylor and Company.

The BATCo was one the first companies to take advantage of the new Act. It lodged two applications totalling 10,000 acres for its Woolgoolga and Coffs Harbour Operations with the Bellingen Land Board in late 1910. The Board conducted a 4-day hearing into these and other applications in Coffs

Harbour Courthouse in January 1911. It concluded that the areas applied for were rough and inaccessible and thus fell within with the provisions of the Act. The Board forwarded its findings to the Minister for Lands, recommending approval which was finally granted as Exclusive Right No. 2 Grafton in February 1912.[26]

This greatly expanded the area covered by the earlier 1,000 acre exemption, increasing it to 5740 acres. It included all of Forest Reserves 27725 and 28154, and parts of neighbouring Forest Reserves 43509 and 44524 stretching westward into the Orara River Valley.

Granting of the Exclusive Right brought about the long-planned construction of the BATCo's second sawmill. The company's district manager, Alexander McKay had submitted his plans for this mill back in mid-1909. The London directors of the Company had accepted them but deferred construction at the time. Construction of the new mill finally got underway in April 1912 and it began cutting in March 1913.[27]

The new mill was situated on Woolgoolga Creek, beside the tramway, on freehold land that the Company owned half a mile inland from the jetty. Unlike the older Jetty Sawmill with its vertical frame saw, it was equipped with a modern Canadian circular saw bench to break down logs. It was the first of its kind in the district, and it cut many times faster than vertical frame saws as well as cutting more accurately.

The BATCo apparently rationalised that constructing it's No. 2 Mill fulfilled the capital investment conditions of its Exclusive Right and did not build any more tramways. Instead it put on a gang of men to begin cutting roads into the area.

A reporter from the *Clarence and Richmond Examiner* visited Woolgoolga in June 1909 and afforded this glimpse of the Company's operations:[28]

The chief industry of Woolgoolga is timber, and this is evident at a glance. The British-Australian-Timber Co.'s mill at the jetty is in full operation, turning out 110,000 to 120,000 feet per week. Fully 100 hands are employed, the company engaging its own cutters, haulers, teamsters. Around the mills are numerous stacks of sawn timber, with logs arriving by tram from the forest at rear. Nearly the whole of the timber cut is shipped to Sydney over the jetty end, and on reaching the metropolis a considerable proportion is reshipped or transhipped to England and distant parts.

A tramline has been constructed to tap the forest at rear, and this has been carried 7 miles through densely wooded territory. For 4½ miles the trucks are hauled by a locomotive, which runs to the foot of an incline, up which the tramlines run for half a mile, the laden tram running down bringing up an empty one. On reaching the top of the incline the tramline is constructed 2 miles further into the bush. A powerful steam hauler drags the logs to the line by means of a stout wire hawser, capable of standing a 20-ton strain. This is ½-mile in length, and this enables the company to cut the timber and remove it from an area a mile wide by means of the tram. Logs are hauled to the line in a wonderfully short space of time, and from grades and ravines that would be absolutely inaccessible to bullock teams. A sheath under the end of the log enables it to be hauled over intervening obstacles, but if these are of too great a character it may be drawn in a zigzag course by the application of blocks and pulleys. When timber is taken from the ½-mile radius the hauler is moved further out to repeat the operation.

The B.A.T. Co by reason of having built the tram line, have been granted the right to operate on some 4000 acres of timbered country, half of which is at present engaging attention, and when the timber is cut out of this area the remaining 2000 acres will be entered upon. It is contemplated to make provision for running the locomotive a further distance into the bush in the direction of the Bucca Creek watershed.

By 1909 the little village of Woolgoolga was bursting at the seams, houses could not be got for any price and everywhere men were camped in tents. The Company owned several tracts of land in the district. One of these was a 90-acre property on the western edge of the village, originally selected by the

Following the closure of the BATCo's Woolgoolga operations in 1914, the Murray and Paterson locomotive was acquired by Hepburn Mackenzie for his timber venture on Fraser Island. Arriving there in 1918, the locomotive acquired a homemade tender to carry additional water and fuel. *Photo: Bruce Macdonald collection*

An early post-World War I scene of the tramway sidings on the approaches to Woolgoolga jetty. Sawn timber from inland sawmills at Bark Hut and Coramba is stacked ready for coastal steamers to take to Sydney. The tramway line to the right of the approach road is the truncated remnant of the BATCo's logging tramway. The siding to the left ran a short distance to ED Pike's town sawmill. Photo: Mark Langdon collection

Taylor family. Permission was obtained from Dorrigo Shire Council to subdivide 40 acres of it, and a contractor was hired to clear off the scrub and form up the streets. Cleared scrub was piled up and burnt, a bit carelessly on occasion, as a valuable horse belonging to William Pullen, one of the village's leading citizens, was killed when a burning tree fell on it.

In June 1909, PJ MacNamara, a Coffs Harbour auctioneer acting as the local BATCo land agent, offered up 140 business and residential lots in the subdivision at a big auction sale.[29] The sale was hardly a success with only 20 lots sold. A few more blocks were disposed of by private sale over the next few months, but 87 remained on the books by the time of the final clearance sale in November 1913.

Both the BATCo's Coffs Harbour and Woolgoolga sawmills were initially supervised by a district manager who also reported to parent company Dalgety & Co. Charles Dorrough, the former owner of the Pioneer Sawmill at Lismore – purchased by the BATCo in 1906 – was the first such manager. He moved to Woolgoolga to take control of operations and built a residence in the village for his family. He held the post until August 1908 when he resigned to start his own business in Brisbane.

He was succeeded by the entrepreneurial Alexander Clarke Mackay, an experienced Victorian sawmiller who had recently arrived in the district. Mackay was the driving force behind the Company's successful push for Exclusive Cutting Rights. He was also largely responsible for setting up a timber syndicate which was granted an 8000 acre Exclusive Cutting Right north of the BATCo's area. This was subsequently sold to the Great Northern Timber Company of Woolgoolga. Mackay resigned in July 1910 and went on to manage the Coffs Harbour Timber Company's mills near Bonville and Boambee.

Following Mackay's departure, the management of the BATCo's sawmills was re-organised. Dalgety & Co withdrew from active involvement in company management, and the operations of the Woolgoolga and Coffs Harbour sawmills were separated. Local managers at Woolgoolga included Mr RM Taylor until October 1910, Mr R Roberts until December 1912 and Mr J Johnson until the end of operations in late 1914.

The First World War

The BATCo specialised in exporting large quantities of junk timber – large flitches of first-class hardwood – to overseas customers in England and Germany, especially rolling stock manufacturers. World War I broke out in August 1914 and almost overnight the export timber trade collapsed. Within a few weeks both the BATCo and its next door neighbour, the Great Northern Timber Company, had shut down their Woolgoolga sawmills.[30]

At first it was believed the shutdowns were only temporary, and over the next few months there were hopeful rumours of the mills re-opening. The BATCo and the Great Northern Timber Company were both initially successful in having the conditions of their Exclusive Rights suspended on account of the war. Towards the end of 1916 it became clear that the BATCo's closure was permanent. In September 1916 its Exclusive Right No. 2 was cancelled on the grounds of abandonment and non-fulfilment of conditions.[31]

Two months later 'For Sale' advertisements appeared for the plant of the Company's two Woolgoolga sawmills.[32] Interestingly, although a locomotive was specifically mentioned in the advertisements, there was no mention of the tramway rails, rolling stock and steam log hauler. It is possible that these had already been sold to the Coffs Harbour Timber Company in March 1915, along with the BATCo's Coffs Harbour tramway rails, rolling stock, log hauler and Shay locomotive.

However a later 'For Sale' advertisement appeared in 1919 for '*250 tons of second-hand 60 and 70 ton (sic) rails with fishplates, for immediate delivery*'.[33]

Assuming '*ton*' is a typographical error, and assuming a rail weight of 60lb/yd, this equates to just over 2½ miles of tramway. Given that short pieces of rail in the order of 60lb/yd were found when field mapping above the incline, perhaps not all the rails were sold in 1915.

As previously mentioned, the Company's Murray and Paterson locomotive (205 of 1886) was acquired by Hepburn McKenzie for his Fraser Island venture in July 1918.

There appear to have been no buyers for the older sawmill at the jetty, but the newer Canadian-bench equipped No. 2 mill was purchased by Johnson Brothers with financial backing from Allen Taylor & Co Ltd. Sir Allen himself visited in October 1919 and while conceding that it was working satisfactorily, was unhappy that the Johnsons had spent £5274 to set it up, twice what he thought it was worth. He also observed that the mill, which relied on bullock teams for its log supply, was short of logs![34] The mill's second life was short-lived; it was destroyed by fire two years later, thereby putting an end to the venture.[35]

The BATCo at Port Macquarie and Nana Glen

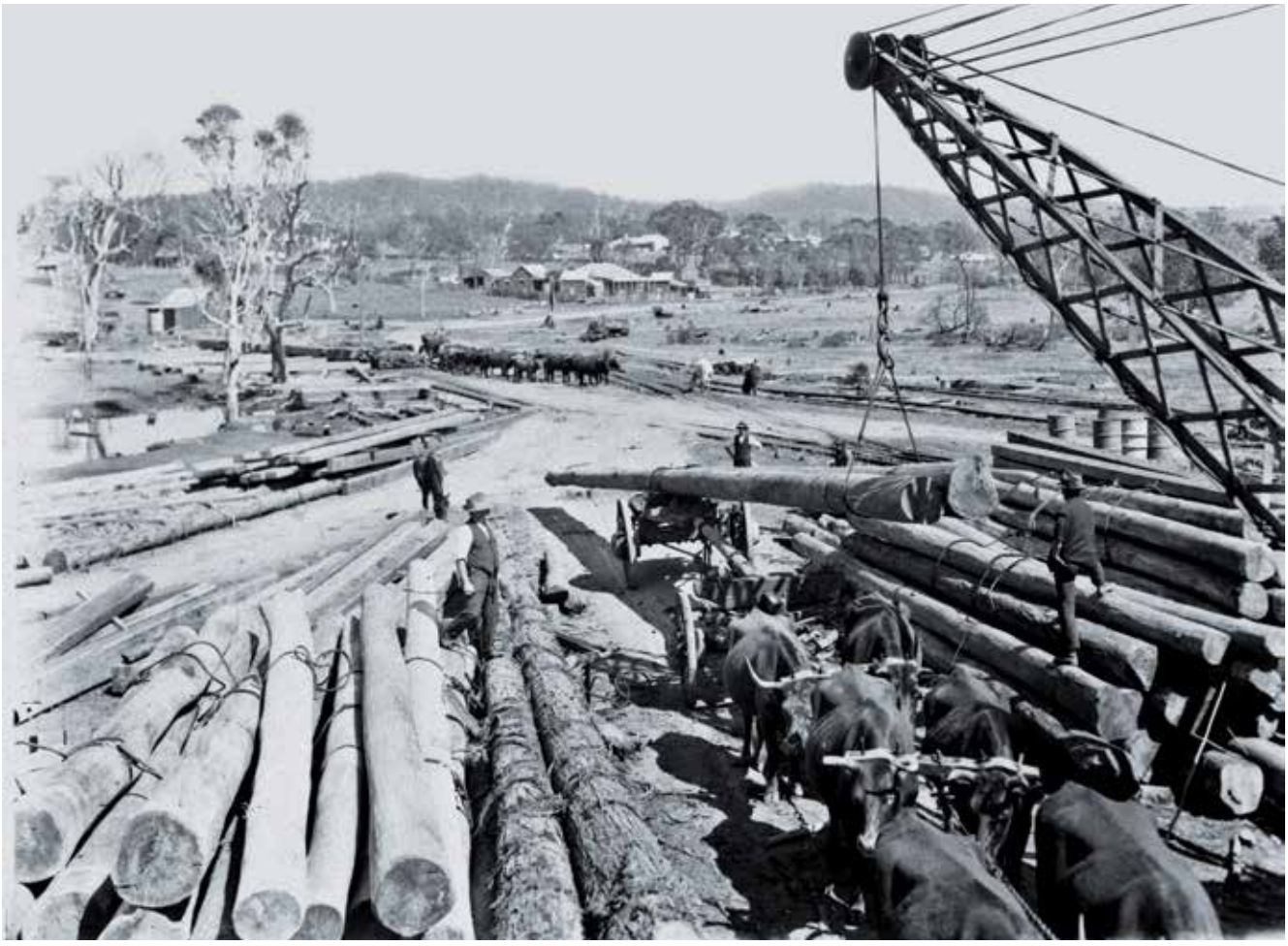
The closure of the BATCo's Woolgoolga sawmills in 1914, and the earlier closure of its big Coffs Harbour mill in 1913, did not spell the end of the Company. It had two smaller sawmills which it continued to operate for many years, albeit without timber tramways.

The first of these was the long-established Hamilton Sawmill on the banks of the Hastings River at Port Macquarie which the BATCo had purchased in April 1911.[36] It had been set up by Messrs Hibbard and Haines in 1887 to cut hardwood timber for the Queensland trade. Logs came to the mill by river punt and bullock team. Sawn timber was loaded onto coastal vessels for shipping to city and interstate markets. Owner John Hibbard was retained by the BATCo and appointed as its Tramway Inspector. The BATCo ran the Hamilton Sawmill for nearly 18 years, making it the longest-lived of all their mills. It was sold to Allen Taylor & Company Ltd in January 1929.[37]

The second mill was at Nana Glen in the Orara River Valley west of Woolgoolga. The Company purchased it from James Porter in March 1913.[38] Porter had erected this small sawmill a year earlier next to the site selected for the future Nana Glen railway station. Any expectations he may have had of sending his timber out by rail came to nothing. Construction of the 8th section of the NSW North Coast Railway between Glenreagh and Coffs Harbour – then referred to as '*the missing link*' – was badly delayed and did not open until 17 July 1922. However the location suited the BATCo as it adjoined the western boundary of its Exclusive Timber Right No. 2.

Bullock teams supplied the Nana Glen mill with logs, and sawn timber was road-hauled to Coffs Harbour by traction engine, horse and bullock teams until the railway opened in 1922. The mill was eventually destroyed by fire in October 1928 and was not rebuilt.[39]

The destruction of the Nana Glen mill and the sale of the Port Macquarie mill marked the end of BATCo's active involvement in sawmilling. It continued to operate a timber yard in Sydney until the Company was finally wound up by Dalgety and Co in the 1940s.



Bullock teams deliver logs and railway sleepers to the Woolgoolga jetty crane ready for shipment to city customers in this 1929 scene. Export of sawn timber has all but finished and the dilapidated jetty storage sidings dating from BATCo days see little use. Photo: NSW State Library collection

Extant remains in 2014

A century of growth and development in the Woolgoolga area has removed nearly all traces of the town's early timber industry. The BATCo's sawmills and logging tramway have long gone, and the jetty itself was demolished in the mid-1950s. A single ancient bridge pile marks the place where the tramway crossed Jarrett Creek, close beside the Woolgoolga Art and Craft Gallery in Turon Parade. The local Heritage Committee has placed a replica 4-wheel jetty tramway truck there to mark the spot.

Further up Woolgoolga Creek traces of the old line can be found along the south bank, near the present-day Woolgoolga bypass. The walking trail to the waterfall within Sherwood Forest Park criss-crosses the creek as it follows the old tramway route to the base of the incline. The incline can be climbed by the energetic, though the upper parts have been badly degraded by trail bike vandals.

About 2km of heavily-overgrown tramway formation survives above the incline. A succession of cuttings and ledges on the west side of Incline Spur Road follows hillside contours south to Powerline Road. Small pieces of 60lb/yd iron rail were found along this section.

One enduring legacy of the BATCo's time in Woolgoolga remains in the form of local streets near where the Company's No. 2 sawmill once stood – Dalgety, Knox, Nash, Smith and MacKay streets – named after Directors of Dalgety & Co and sawmill manager Alexander McKay.

Acknowledgements

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Thanks are also due to Dr. John Kramer and Woolgoolga Heritage Committee members David Fayle, Norm Michener and Joy Richardson for assistance, access to local history resources and period photographs. A last-minute photograph received from Mark Langdon was very welcome.

My gratitude again to field researcher Mick Allison for his sterling assistance during the mapping expeditions along the old tramway formations through very difficult country.

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The Woolgoolga Heritage Walk Committee constructed a replica 4-wheel jetty tramway flat truck with a tallowwood log mounted on it. It is positioned at the site of the BATCo's tramway bridge across Jarrett Creek, next to the Woolgoolga Art Gallery in Tuross Street. Photo: Ian McNeil

Don Tramway, Northern Tasmania c.1892 In 1853 Messrs Cummings, Raymond & Co commenced a sawmilling, trading and shipping business at the River Don, near the future Devonport. For logging purposes a tramway was built up the Don valley. In 1872, John Henry bought into the business, trading initially as Cummings, Henry and Co, and later as John Henry and Co. In 1880 the River Don Trading Company was formed. Additionally, from 1872, the existing tramline was replaced with a new line of 4ft 6ins-gauge, from the company's wharf, along the west bank of the River Don and up the Melrose valley. In early 1874 a home-made locomotive was tried on the line but was unsuccessful. About half the line was laid with iron rails by this time, some obtained second-hand from the TMLR. By May 1879 the tramway was completed to Barrington, about 11 miles. As timber was removed farmers settled on the productive land in the Barrington area. By the early 1890s most of the available timber was gone. It is thought the tramway was abandoned by 1896, a victim of the failure of the Bank of Van Dieman's Land. This delightfully surreal photograph was made made c.1892 by William L Wells, a member of the Northern Tasmanian Camera Club (which still exists). Judging by the state of the track it is not hard to understand how, around 1888, a local Church of England minister, the Rev. E. Champion, riding on the tram on his way to conduct a service, was unseated and fell, sustaining severe injuries.

State Library of Tasmania, ref: AUTAS001139592430-p05

Log Hauler, Southport mill

In the depths of Tasmania's southern forests, a bush crew pause for a minute whilst the photographer records this scene for posterity. We know the date is circa 1902, the owner is Robert Hay and the gauge is 4ft 6ins. Unfortunately the names of the men and horses are not recorded nor that of the photographer. Pity. The boiler, ex-TGR, originated from a TMLR Dübs tank loco, and provided steam to a winch for hauling logs to the bush landing. It sits on a pair of bogies and could be moved around the bush logging lines, run onto a temporary siding and chocked in position. Centre of scene is a square ships' tank on a truck that can be taken to a nearby stream and returned with water for the boiler. The winch driver has built a rudimentary shelter for himself – no doubt he had lots of friends on cold days. Once at the landing the logs are loaded onto a pair of log bogies and despatched to the sawmill.

State Library Tas: NS1013-1-1469

Homebush *at Miltons Loop after collecting the load from one of the mill's diesel locomotives.* *Photo: Luke Horniblow*

Homebush centenary

by Christopher Hart

Victoria Mill's Hudswell Clarke 0-6-0 1067 of 1914 *Homebush* is one hundred years old this year. As part of the celebrations to mark the occasion, it was decided by mill management to use this loco to haul the first rake of cane bins to the mill for the 2014 crushing season. Your author was the designated driver for this trip.

Homebush was built for CSR's Homebush Mill near Mackay and was a lighter version of their standard Hudswell Clarke 0-6-0, to suit the Homebush track. After Homebush Mill closed in 1921, 1067 was transferred to Victoria Mill where it received its name and took on a variety of duties until finishing on cane hauling in 1976. It was then overhauled and retained by the mill for use on special occasions involving the local community.

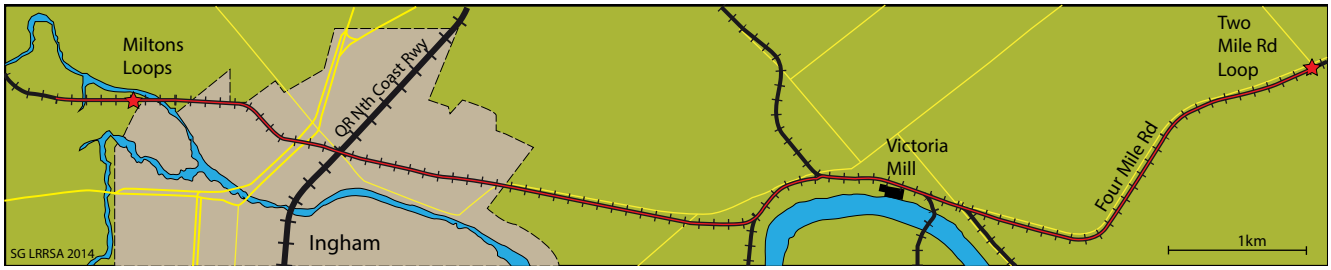
The run with the first rake of cane bins was set down for 23 June and we decided to have a practice run with a rake of twenty empty bogie bins on 20 June as we had very little experience driving the loco with a decent load on. We did this run on the Bambaroo line as far as about Toobanna and *Homebush* took off with this load in a lively manner. A couple of miles up the line and we found the steam pressure dropping and had to stop for a blow up so learned that we had to adjust our firing techniques to suit a load greater than the couple of passenger carriages that we were used to pulling around.

On 23 June, myself and fellow crew members Gene Collins and Peter Phillips, set out light from the mill and went through Ingham to Miltons Loop where the full bins were waiting for us, having been brought there by one of the mill's Baldwin bogie locos. The load consisted of twenty-five 8-tonne bins and we had a bit of a slippery start owing to grease on the line. The source was the axleboxes of trains of empty bins that had passed through during the previous days. These bins had all been greased during the slack and the excess tends to fly off when the trains get up to speed.

I was able to control the slippage by using a little sand and taking things steady. This was the only occasion that slipping was experienced on the trip and we ended up taking off in fine style.

We then pulled up at Rinaudo's siding and waited for the start time of 11.00am for the official run through town to the mill. The opportunity was taken here for interviews by the local paper and plenty of sitting duck photos by the locals. While here, Red Ogston, who is an old steam driver and another of *Homebush*'s regular drivers, gave me advice on handling the load through town. Unfortunately, he was unable to drive the loco this day owing to a work injury.

Eventually, we got the OK to leave and glided away on the downhill start from Rinaudos. The load pushed us down past Gedge Street and getting towards Herbert Street, the Bruce Highway, I gradually added power as we went into the grade there. By the time we were onto Herbert Street, the regulator was nearly all the way over and the reverser in full forward. The sound effects from here to the railway were fantastic and no slipping!



The bark this loco has when working hard is truly soul stirring and a sound that has been sorely missed round the district for a long time.

I eased off a bit as we came to the railway and from there to Mill Road, it is level or downhill and so the regulator and reverser came back accordingly. There was more powering on once across Mill Road for the short uphill there, but once over the crest it was coasting all the way to the full yard at the mill.

We passed through the Half Acre section of the full yard and then down the 4 Mile line where a stop was made in front of the mill office for more photos and interviews by the television people.

We nearly didn't make it out of the full yard owing to a slow departure and the long rigid wheelbase 8 tonne bins binding up on the tight curves leading out of the Half Acre. Everything ground to a halt, but fortunately a nearby loader in use by the navvies was able to give us a hand and we got away.

Once the hoo haa was finished with the television people, we continued along the 4 Mile line to allow them to obtain more footage of the train in action. Eventually, we pulled up at the 2 Mile Road intersection and following loco *Cairns*, a Walkers B-B DH, coupled up and took the load back to the mill. We with *Homebush* followed behind, well satisfied with a great day in steam and wishing we could do it again.....

Top: *Map of the route traversed from Miltons Loop through Victoria Mill to the 2 Mile Road on the 4 Mile line.*
Above: Homebush *on its way though the Ingham township. Photo: Luke Horniblow*
Below: *On 20 June,* Homebush *is out near Tobanna on the Bambaroo line with a rake of empty bogie bins. Photo: Luke Horniblow*

In the shadow of The Prom

by Mike McCarthy

To someone living in the fledgling colony of Victoria in the early 1850s the rocky headland of Wilsons Promontory jutting south from the Gippsland coast seemed like the last of a succession of barriers to the coastal wilderness beyond. One had to cross the swamps of the Bunyip River, the Strzelecki Hills and the Hoddle Range over the journey with only rough tracks to guide the way. East of Wilsons Promontory there was only one settlement of note and that was 58 kilometres away at Port Albert, a small shipping and trading village, established on the muddy shores to the east of the aptly named Corner Inlet by the Gipps Land Company a decade earlier.

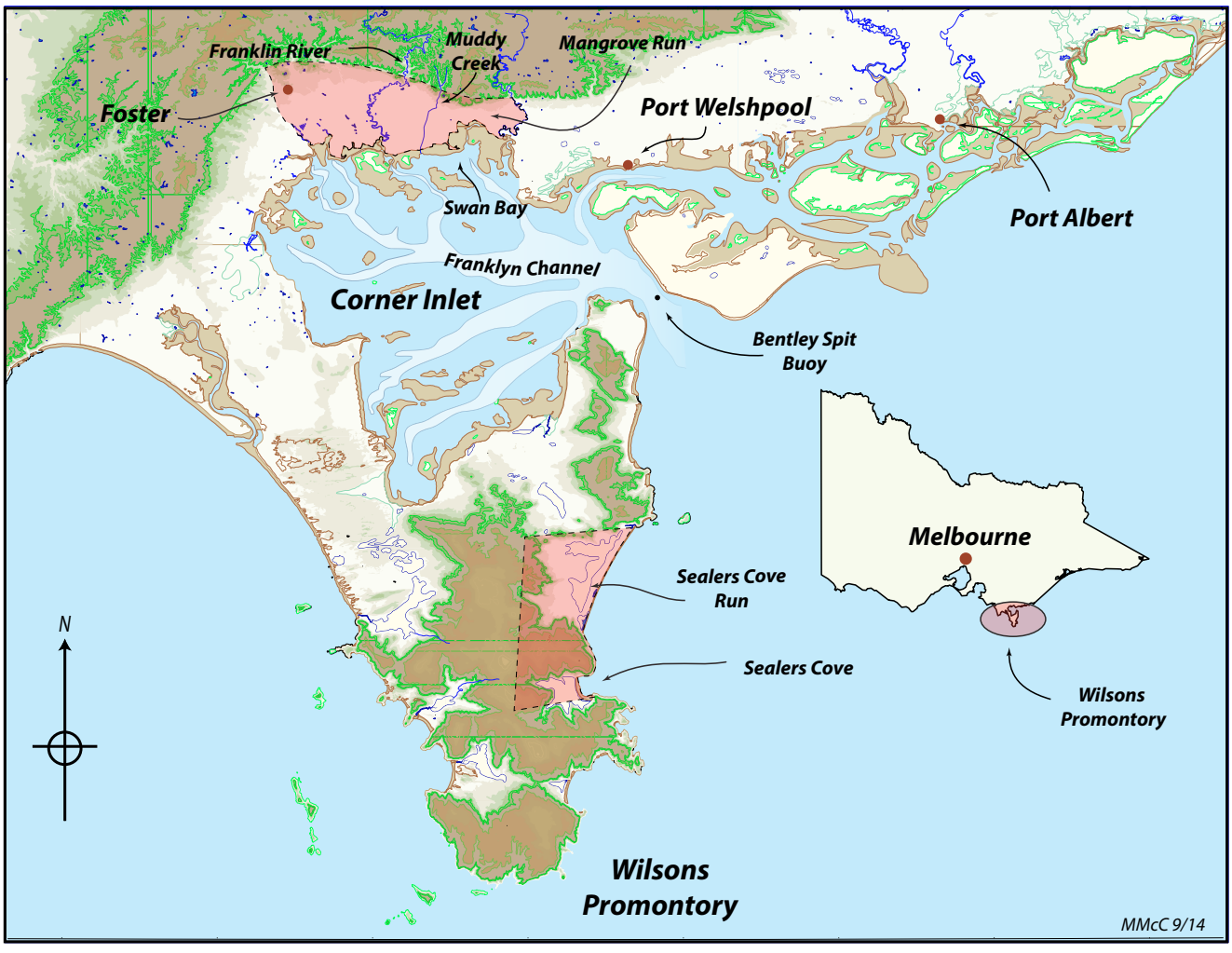
In later years Port Albert was to rise to prominence as the principal access point to the Gippsland goldfields. However, in the 1850s, arrivals were mostly either directly or indirectly linked to the activities of the many squatters to the north and east.

In the early 1840s the Gipps Land Company (later to become the Port Albert Company) had acquired the land abutting the landing point at Port Albert and was able to function as a monopoly with respect to much of the business about town and the port. A noted member of the Company was John Turnbull. He was the eldest of six brothers who had migrated from East Lothian, Scotland, around 1839 with their mother and sisters following the death of their father. The others were Phipps, Robert, Patrick, George and David.

The brothers were to become prominent in one way or another in the commercial life of early Victoria. One of them, Phipps, was an inaugural member and one-time president of the Melbourne Chamber of Commerce.[1] The businesses they established were independent of each other but were nevertheless often complementary in function and for this reason transactions between them were common. At a time when regulation was far less stringent, the combination of commercial links and kinship could provide significant advantage where trust was important, particularly when confronted with adverse commercial events and the actions of courts. The Turnbulls, although respected, were certainly not averse to assisting each other in times of need and, seemingly, were prepared to stretch the boundaries somewhat to do this.

Patrick and George initially teamed up as Melbourne wine merchants but later became general merchants and shifted their interests to Port Albert. They traded under the banner of Turnbull Brothers as merchants and commercial agents centred on the port area.

Robert opened a store at Port Albert and, with John, came to own the prime land around the wharf. It was a profitable business that led him to broaden his focus to that of a shipping agent. Whilst maintaining his other interests in Port Albert he eventually partnered with brother Phipps, trading as Turnbull & Co, and moved the business to Melbourne. Another brother, David, took over running the Port Albert merchant business.[2] The Turnbulls would act on behalf of ships' owners in arranging cargoes and also for importers of goods in selling products to Melbourne retailers.



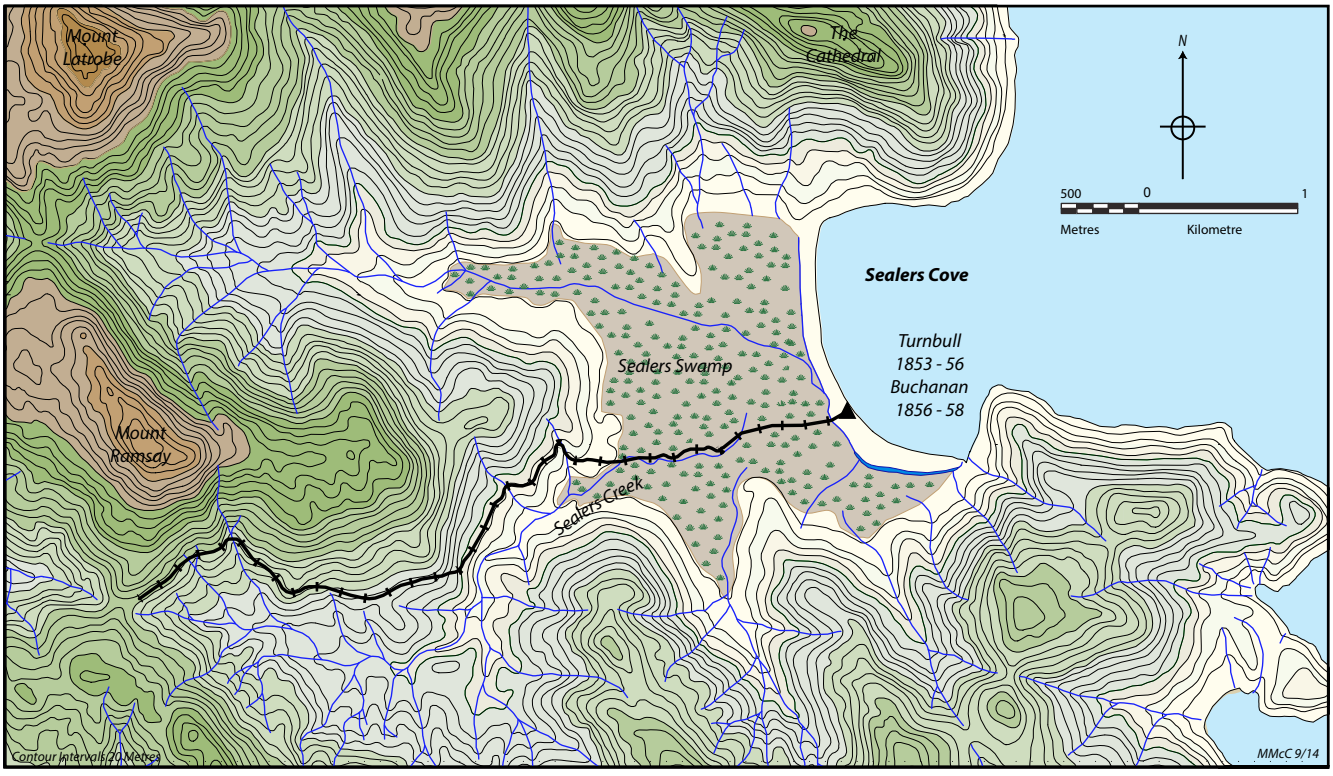
With many of the ships arriving at Port Albert carrying cargoes arranged by Turnbull & Co there was a close relationship between the two firms, with Patrick and George at times employed as sub-agents to their brothers, Robert and Phipps, when dealing with the Melbourne firm's ships and cargoes.

Sealers Cove

In 1849, however, it was Robert who was plying his trade through his Port Albert store whilst Patrick and George were operating as merchants in Melbourne. The city was growing rapidly at the time and the demand for split timber was strong. Staves for barrel manufacture, palings for fencing, and felloes, spokes and naves for making wheels were all in short supply. With encouragement from Robert, who had taken up the Sealers Cove Pastoral Run, timber splitters moved into the Cove, on Wilsons Promontory, during 1849. They sold their output through Robert who arranged transport, mostly aboard the schooner *Colina*,[3] to Melbourne where Patrick and George acted as agents. The trade grew rapidly and during 1850 close to 20,000 staves were despatched. A pit saw and associated equipment was delivered late in the year so subsequent shipments included sawn timber as well. At the corner of Little Bourke and William Streets Melbourne, a timber yard was established to sell the timber.[4] At this early juncture seasoning technology to treat the native timbers did not exist, so its use was restricted mainly to large structural purposes, barrels and cart components.[5] Smaller timber sizes were difficult to sell at a reasonable price. The cart components would have been manufactured from the Blackwood that was prolific in the valleys stretching away from the Cove while the structural timber would have been sawn from the Blue Gum that was also plentiful on the higher parts of the run.

Demand for sawn timber climbed as Melbourne grew. The opportunity was there to grow the business but producing beams in large quantities with pit saws was both laborious and expensive. In 1852 Robert ordered a sawmill plant from Great Britain. It was a powerful unit with a horizontal steam engine of approximately 60 hp and a large boiler to feed it.[6] The mill incorporated a vertical breaking-down saw and a rip bench, and was installed and in full swing by March the following year. Accompanying the machinery was Peter McMillan, a Scottish engineer from Stirlingshire. McMillan was employed to erect the machinery[7] but William Buchanan, one of Turnbull's employees, was given the task of running it.

Robert Turnbull (1819–1872) was a principal of Melbourne agents and merchants Turnbull & Co. He was responsible for the establishment of sawmilling at Sealers Cove and with brother Phipps, was the final owner of the Muddy Creek sawmill. Photo: State Library of Victoria



Buchanan was also from Stirlingshire and married McMillan's daughter, Sarah. He had been at Sealers Cove from as early as June 1851 when he despatched two Blackwood logs to London, presumably to test the market there.[8] He was joined in Australia and probably at Sealers Cove by his brothers James, Andrew and Robert.

Output during 1854 was 867,319 super-feet of sawn timber or around 2,800 super-feet[9] a working day; respectable but by no means anywhere near the capacity of such a powerful sawmill. There were 53 men employed and also resident were eight women.[10] The large number of employees would suggest that timber splitting continued alongside the sawmill.

With much of the forest close to the Cove removed by the splitters, Buchanan constructed a tramway,[11] probably of three feet gauge, westwards from the mill to bring logs down from the slopes of Mt Ramsay. It eventually stretched up the valley on the southern fall of the mount, climbing almost to the saddle. Loggers working there would have enjoyed superb vistas of the coastline stretching to the north-west in one direction and the rugged approaches to the Cove to the east. Gravity brought the log trucks down the side-cut carrying the tramway to the mill while horses hauled the empty trucks back. From the mill, sawn timber was despatched over a length of tramway that extended to the beach. It is not clear if Turnbull had arranged for the construction of a jetty but it is possible that he did. The demurrage charges for ships held up for loading from whale boats or punts would have provided an incentive to do this.

Many ships were used to convey the timber to Melbourne. They included the *Valiant*, a 142 ton brig; the *Xarifa*, *Cecilia*, *Leven Lass*, *Glencoe*, *Eliza Goddard*, *Douglas*, and the 79-ton *Meg Merrilies*, all schooners. They arrived every three weeks or so to take a load to Port Phillip.[12] With the sawmill in continuous operation large stocks of timber accumulated awaiting the next boat.

Until mid-1855 Turnbull's main competition came from Van Diemans Land, but neither could compete with structural timber sawn from logs obtained from areas close to Melbourne. By May 1855 there were several sawmills working in the city area or in outlying suburbs such as Collingwood. Shipping records from vessels arriving from England and Scotland listed sawmills and portable steam engines on their manifests at the rate of close to one a month. Logs would have come from the nearby countryside in areas such as Kew which were being subdivided and cleared at the time.

The despatch of timber from Sealers Cove declined to a trickle after May 1855[13] and twelve months later, seemingly, Turnbull gave up. Through auctioneers Stubbs and Son he offered the plant and premises for sale on 14 May 1856 suggesting its suitability for those '*connected with the timber trade, railway, or other extensive contracts, as builders &c*'.[14] It appears there was no buyer but William Buchanan took a lease over the plant. It proved to be a rewarding initiative as late in 1856 he received a number of orders associated with the construction of the Melbourne to Geelong railway. Between July 1856 and December 1857 an average of a ship load of timber was despatched each month, mostly on the schooners *Commerce* and *Hercules*.[15]

The mill ceased regular operation around March 1858 after much of the forest around Mount Ramsay had been cut out and Buchanan had agreed to enter into an arrangement with George and Patrick Turnbull in running the Franklyn River sawmill, previously owned by Martin and Dobson, on the northern side of Corner Inlet. (*NB Modern spelling is "Franklin"*.

Sealers Cove was and remains a place of great beauty and solitude accessible only by foot or by sea. It was often used as a place of refuge for sailing vessels in heavy weather. The slopes of Mount Ramsay, behind the photographer, provided the logs for Turnbull's Sawmill and were the source of the Blue Gum piles and wharf timbers used in conjunction with early Melbourne railways and wharves. *Photo: State Library of Victoria*

For the purpose of consistency the spelling in use at the time of operation is used, hence "Franklyn".)

However, this was not the end of timber from Sealers Cove. Under the management of William Buchanan efforts were made to dispose of the large stock of timber on hand. He formed a relationship with TE Fisher at Port Albert to sell timber through his yard welcoming orders for '*every description of timber*' for homesteads.[16] The final despatch to Melbourne occurred in January 1858 when the *Lady Harvey,* a 146 ton brig, arrived loaded to the gunnels with large-section timber, which was placed in the hands of Alexander Young and Co to auction from Melbourne's New Dock.[17] The mill was operated spasmodically supplying timber in small lots to Port Albert until around June 1858 when it was closed and shifted to Muddy Creek, a small stream that emptied into Corner Inlet to the north.

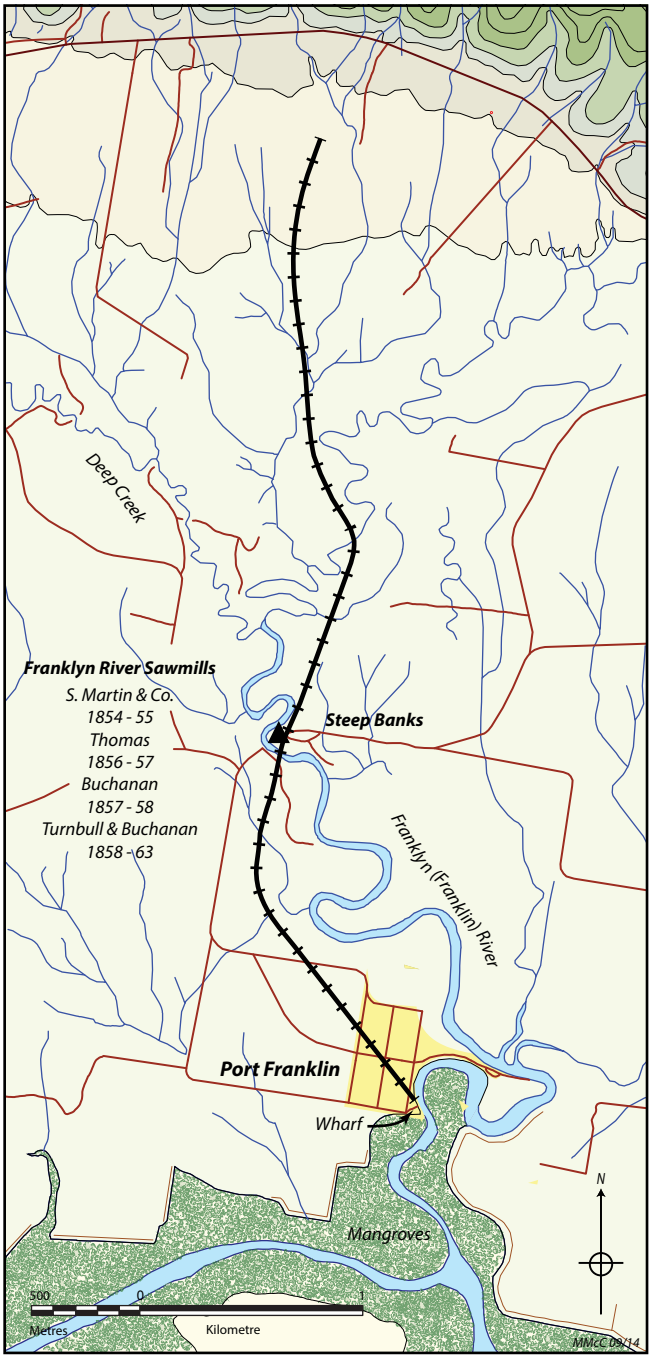
From this time, and for the following 40 years, Sealers Cove was, for all intents and purposes, abandoned as a settlement, leaving the ruins of the mill shed, the huts and log tramway for nature to deal with. However, in the lee of Wilsons Promontory within the confines of Corner Inlet, another operation had been underway for a number of years.

The Franklyn River Sawmills

Corner Inlet, a vast 600 square kilometres bay protected by the mass of Wilsons Promontory from all weather bar that from the east, had been a haven for ships caught in inclement weather since the early days of the 19th century. It was said that a fleet could anchor within its precincts. It is interlaced with channels which mark the ancient alignments of rivers which now empty into salt water a long way upstream from where they once did. The Franklyn Channel was one of these, and probably the safest to navigate. It was fed by the Franklyn River which itself was navigable for shallow draught boats for about five kilometres at high tide. It was at the extreme limit of the navigable water along the Franklyn that Septimus Martin took delivery of a sawmill on 27 September 1853.[18]

The equipment had arrived in Melbourne from London aboard the *Sagittarius*, a 206 ton barque, during August[19] but was left on board to be delivered to Corner Inlet on the vessel's onward journey to Mauritius the following month.[20]

Martin was a 31 year old Englishman from Kent who, until two years earlier, in conjunction with his brother Frederick, had held the rights to a pastoral run south of the Kooweerup Swamp. The ambitious Septimus had entered a partnership with 36 year old Melbourne man, James Dobson, to lease a pastoral run in the area north of Corner Inlet. They named the lease '*Mangrove run*' on account of the dense melaleuca that lined the shores and muddy banks of the streams leading into the Inlet. Dobson, whose late father had run a general store in Alberton, north of Port Albert, worked as a general merchant, ship owner and agent. Along with many others of his time he sought to make a fortune from the rapid expansion of Melbourne as the gold rush took hold. The population was growing rapidly as mining expanded and syndicates formed to connect the major towns with railways. Dobson's boats were plying between Sydney, Geelong and Melbourne carrying miners and businessmen to join the rush. With his brother, he leased another run on Cape Liptrap, to the west of Wilsons Promontory, which was given over to raising cattle for Melbourne's tables. He may have had a similar plan for *Mangrove run*. However, an advertisement for someone to erect and operate a sawmill in April 1853 suggested he also saw another means of profiting from the boom.[21] *Mangrove Run* comprised 10,000 acres, much of which was covered with Blackbutt, Blackwood, Stringybark and Blue Gum, all



valued timbers for various uses. The Blue Gum in particular was wanted for structural purposes and railway sleepers.

How Martin and Dobson met is unknown but the partnership was formed under the banner of S Martin & Co, suggesting Martin was the operating partner.[22] The two brought a number of synergies to the business that may explain their relationship. Neither was wealthy, but Martin was cashed up following the sale of his Kooweerup run and Dobson had enjoyed some success in his ventures and may have benefited from the estate of his father, a successful merchant. Dobson owned ships and had access to others, an essential requirement for a business operating at Corner Inlet in those times where the sea offered the only practical means of access. Martin was a hands-on operator who was used to living and working in a remote area. The missing element, of course, was sawmilling experience; a rare commodity in 1853 Victoria where most timber was imported from Van Diemens Land, the Baltic or from America. However, it was to meet this requirement that, under Dobson's name, an advertisement to run the sawmill was placed.

A Mr Herrman was the successful applicant[23] and it was probably he who selected the site and erected the mill. The positioning of the machinery was sufficiently inland to enable fresh water to be drawn for the mill boiler and the needs of the resident workers. However, at high tide, the river was also usually navigable as far as this point for shallow draught boats or lighters. The likely intention was to despatch timber down-river on lighters for trans-shipment to coastal vessels waiting offshore. The large shelf alongside the river was ideally suited to the stacking of timber awaiting shipment.

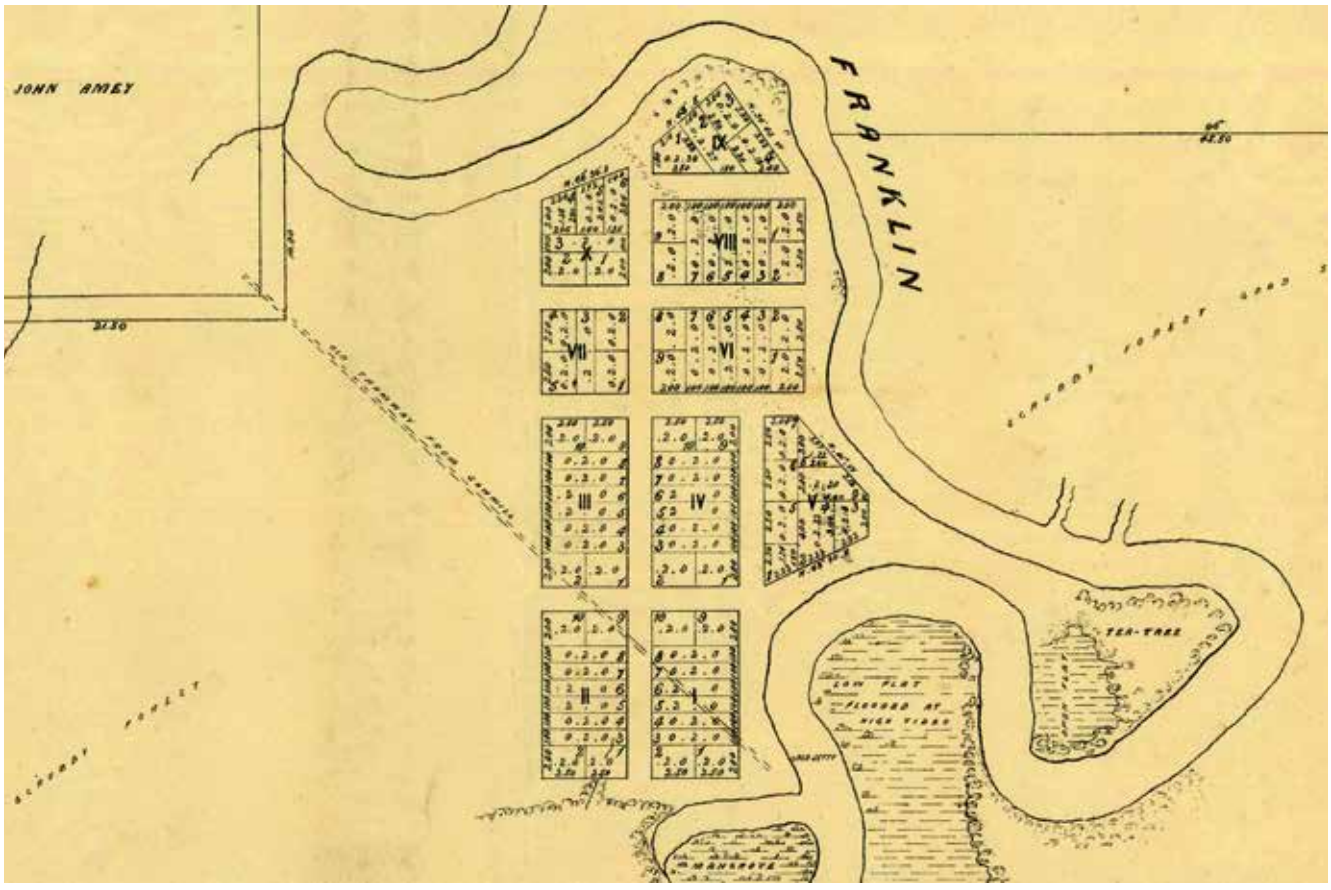
The plant was positioned on the east bank of the stream and was driven by a 20hp steam engine. A large vertical breaking-down saw reduced the logs to flitches while circular saws completed the task of turning out sawn timber at the required sizes. The mill shed, a substantial structure, was roofed with corrugated iron. A blacksmith's shop, equipped with portable forges, manufactured components as required and helped keep the machinery in operation.[24] There were huts to accommodate 50 workers spread across both banks of the river and a store provided for the needs of the residents.

As well as bringing the plant, the *Sagittarius* also brought the workforce. *The Argus* had carried an advertisement calling for '*woodsmen and labourers*' offering a wage of £6 10s per month plus rations.[25] Applicants had to bring their swags with them as they were to board and depart immediately. Clearly the men were to be engaged in clearing the site and erecting the mill. A storekeeper with bookkeeping experience was also employed and, with Martin's wife remaining at their Melbourne home, the storekeeper's wife was required to cook and wash for Martin as well. The couple needed to be honest, sober and childless![26]

By late September 1854 the plant was erected and sawing had commenced. The business took the name of "The Franklyn River Sawmills" and its output was principally domestic structural timbers such as joists and bearers.[27] The *Alice Martin*, a small 80 ton schooner, brought the first load of timber to Melbourne on 2 October. Along with the 49,000 super-feet of timber, also on board was Mr Alfred Woolley from the firm of Woolley and Robinson under whose auspices Martin and Dobson had arranged to market their timber in Melbourne.[28] It may have been a trial of the arrangement because a month later a small flurry of advertisements from Martin & Co sought a bullock driver, a stoker for the mill boiler, a couple of timber fallers and two axemen, '*Canadians preferred*'! The sawmill was going into full production with logging extending from the immediate mill precinct, and as the trees were tall, experience was required. Carpenters were also sought to construct the huts, stables and a house for Martin.[29]

The *Alice Martin* returned in January to collect a further 50,000 super-feet of timber on behalf of Woolley and Robinson[30] but it was to prove to be the last. After a positive start the partnership found itself in disarray; Dobson had been declared insolvent and could not trade. It appears he was left with a large liability from a ship he had sold that was not fit for sea.[31] However, in all probability his investment in the Franklyn River Sawmills was a significant contributor to his situation. Over the five months the mill had operated, approximately 120,000 super-feet of sawn timber had been produced or about 1000 super-feet per working day. A typical mill of the era would produce six times that volume. Martin and Dobson would not have covered costs with sales from that level of production. Consequently, the period of operation would have eaten into their cash and contributed significantly to Dobson's predicament.

It is unlikely that Martin and Dobson made use of tramways during their time of operation. The mill was positioned to take advantage of the river for transport and the rise and fall of the tide would not have seriously impacted on the ability to



The original survey for the township of Bowen (Later Port Franklin) displayed the alignment of the Franklyn River sawmill tramway. Thirty years after abandonment the decayed rails were still evident on the ground. *Public Record Office of Victoria*

carry away the small volumes of timber despatched. Lighters or barges were used to carry timber from the river bank to ships moored in the Franklyn Channel at the entrance to the river. Much of the logging would have been in the vicinity of the sawmill, a task that bullocks could easily accomplish. However, it is also likely that Martin and Dobson constructed a logging tramway to the north into the Blue Gum forest.

The *Alice Martin* made a final journey on behalf of the firm in early February 1855 when the remaining inventory, some 20,000 superfeet of timber, was sold by auction from its decks at Melbourne's New Dock.[32]

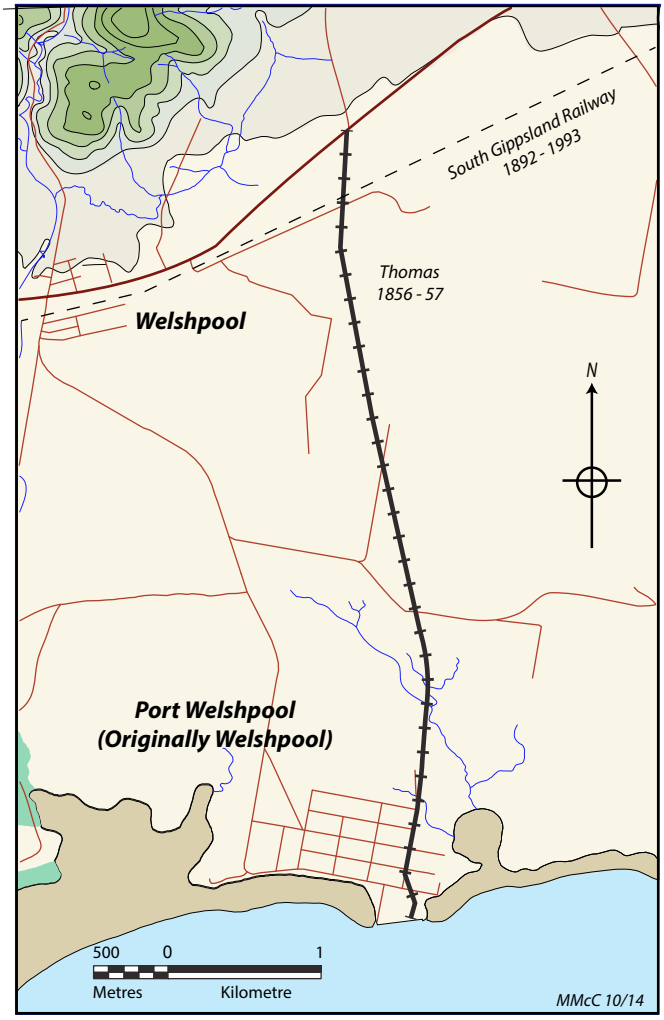
For the following sixteen months the sawmill sat idle alongside the Franklyn River while Martin and Dobson sought a buyer or lessee for their business.

It wasn't until August 1856 that Captain George Thomas of Williamstown took up a three year lease of the mill.[33] Thomas was a timber trader and general merchant at that time.[34] The period of idleness to this point could be attributed to competition from the sawmills of Melbourne itself (there were four at the time) and from the massive volumes of timber coming across Bass Strait from Tasmania (formerly Van Diemens Land). However the construction of the Geelong and Melbourne Railway was to provide opportunity for the Franklyn River Sawmills, or, more correctly the timber that predominated in the Corner Inlet region. Blue Gum was the principal species. It was prized for its strength and durability when used for heavy construction purposes and also for railway sleepers. Thomas, who had placed an engineer, Charteris, in charge, successfully tendered for sleepers, piles and decking timber for the railway. The quantities were to be massive and the first three months were spent in preparing the sawmill to handle the volumes. Shipwrights and lumbermen were employed[35] to construct barges to carry the heavy timber out to the waiting ships and it is most likely at this time that tidal dependent access by river to the mill was removed as a constraint. The river was not navigable for anything other than the smallest of boats and then for only a short time each day around high tide. This would have made the despatch of large volumes of high tonnage timber untenable, so it is probable that the tramway that was constructed to a point much closer to the mouth of the river was laid at this time. Concurrently, a wharf was built to facilitate loading of ships.

The tramway was of wooden rail construction and probably of three feet gauge. It ran south and then south-east through thickly wooded country for 1.7 kilometres from the sawmill to the wharf.

Thomas sourced 200 of the piles he had contracted to supply for the railway, not from the Franklyn River area but from the area north of Welshpool (now Port Welshpool), some distance to the east. Bullock teams were engaged to haul the piles[36] but it was most certainly Thomas who constructed a tramway from the jetty at Welshpool to the foot of the ranges as part of this work. Little is known of the line and if it were not for the efforts of latter-day surveyor James Usher we would not know of it at all.[37] No mention is made of it in contemporary news reporting.

Captain Thomas had been described as a '*practical man*' in the wake of the reopening announcement,[38] suggesting perhaps that his predecessors were not, but evidence suggests his plans, expertise and pocket were mismatched. The first load of timber was despatched to Geelong aboard the *Esperanza* in November 1856.[36] This was followed by the *Buonaparte*, *Eliza Goddard* and the *Swan* over the following six weeks. However, early in the following February, Thomas found himself having to front the Port Albert Magistrate for not paying his workers. His plea centred around a lack of funds until the next ship arrived.[40] Thomas's financial strain was caused by the cancelling of a contract he held with the Melbourne and Hobson's Bay Railway Company for the supply of sleepers.[41] Clearly he also owed money on his lease, for by March 1857 he was gone and Martin & Co had placed the sawmill on the market for sale or let.[42] Thomas was declared insolvent in the following May.[43]



The lease was taken up by William Buchanan who had been kept busy supplying the Geelong and Melbourne Railway contractor from the Sealers Cove mill which he also held under a leasing arrangement at that time. The railway was probably the largest project undertaken to date within the Colony of Victoria but the demand for timber was vastly greater than that which could be supplied from the remaining Blue Gum forest in the vicinity of the Sealers Cove sawmill. Buchanan took over Thomas' supply contracts and ran both sawmills to capacity over the following twelve months supplying Blue Gum sleepers and timbers as well as piles for bridging. Much of the piling timber for the Saltwater Viaduct (western approaches to what is now the Maribyrnong River) came from Buchanan.[44] During the period to March 1858 ships were despatched at a rate of better than one a week and it was not unusual for there to be, at times, five to six vessels anchored in the inlet awaiting their loads.[45] Some tonnages were so large that fully laden vessels could not negotiate the bar at the entrance to Corner Inlet and were topped up on the ocean side by lighters coming from the Franklyn River wharf. For loading close to the river mouth barges were used, but for those anchored further out two small schooners, the *Flying Cloud* and the *Margaret Russell* were employed as lighters.[46] Small loadings were despatched from time to time to Port Albert for local sale.

Buchanan extended the logging tramway further to the north, deep into the forest. The bush along the way was dense with Blue Gum and Messmate but the bulk of the taller Blue Gum, needed for piles, lay close to the hills and on the slopes of the range three kilometres from the mill. The route taken for the tramway was mostly over level or gently rising country which presented no difficulty other than clearing a path through the trees. The Franklyn River was bridged twice, the first by means of a structure four metres above the water and spanning 33 metres across the stream. Buchanan employed bullock teams in the bush to snig logs to the tramway while horses hauled them along the line to the sawmill.

An additional boiler was brought in by Buchanan to maximize the effort of the mill engine.[47] Seemingly this was paid for by Martin and Dobson as they retained ownership and raises the possibility that the original boiler was undersized.

The sawmill settlement grew substantially over this period and took on the name of Steep Bank, an early name attributed to the Franklyn River and a title by which the sawmills were referred to from time to time. Vessels arriving and departing would often list passengers as part of their manifests. The number of travellers would have reflected the ebb and flow of workers associated with the sawmill and its bush operations. With only the small Port Albert population to draw on locally, most of the men came from Melbourne and occasionally Buchanan needed to advertise there to attract sawyers and woodsmen.

Matters came to a head for Martin and Dobson in February 1858. Probably driven by Dobson needing to settle his affairs following his bankruptcy, a decision was made to dissolve the partnership and sell the Franklyn River sawmill and the rights to the *Mangrove Run*. It was good timing as Victoria was being flooded with capital at the time and new public works, especially railways, for which the Corner Inlet Blue Gum had proven so suitable, were proposed or underway. The auction was held on 12 March 1858 but the property was passed in. However, by June, it had been privately sold. Interestingly, the successful purchasers were Patrick and George Turnbull trading as Turnbull, Buchanan and Co.[48] On the face of it Buchanan was a partner and joint owner of the acquired assets and in fact that was what Buchanan thought as well. To his dismay he was to discover sometime later that this was not the case!

Martin and Dobson were paid handsomely for the Franklyn River sawmills and removed themselves from any further involvement in the district. What became of Dobson is a mystery, but Septimus Martin went on to a reasonably distinguished career as a Police Magistrate, Captain of the Richmond Volunteer Rifles, manager for a time of Cornish and Bruce, and an investor in a number of enterprises associated with mining. He lived comfortably in his Moonee Ponds home until his death in October 1885.

The Turnbulls had big plans for the Corner Inlet sawmilling business. Construction of the Geelong to Ballarat Railway was about to start and work was also underway to extend the Railway Pier at Williamstown. Both works would need large quantities of heavy gauge Blue Gum timber which represented great opportunity for the firm. But to achieve this, change was necessary in order to have uninterrupted access to a suitable forest.

The sawmill had occupied the site on the Franklyn River for five years and most logs were now being hauled close to three kilometres over the log tramway from the slopes of the range in the north. The area had not been cut out; however, with massive railway and harbour works imminent, a site that offered a dependable and continuous supply of logs for years to come was needed. The decision was made to sell the Franklyn River mill for disposal and to shift the more powerful Sealers Cove plant to Muddy Creek, a small but reliable stream four kilometres to the east. Most of the remaining Blue Gum on the run lay in that direction and the chosen mill site was midway between the cut-out area around the Franklyn and the eastern extremity of the run at the Agnes River. It also benefited from the easy access to the timber in the Muddy Creek valley directly to the north that the site offered. The move dealt with a potentially serious threat to the future of the sawmilling business whilst at the same time provided for the possibility of being left with a valuable grazing property once the timber was removed.

The Turnbulls successfully applied to exercise their pre-emptive right to purchase 640 acres of their *Mangrove* pastoral run. This stretched to the east of the sawmill, which was to be located close to the mid-point of the western boundary. The land included plenty of flat country suitable for grazing in the future and a large section of prime Blue Gum forest across the northern third of the property. What was part of the *Mangrove Run* was to become the *Mangrove Pre-emptive Right*.

To be continued….

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The Lethbridge Quarry

by Stuart Thyer

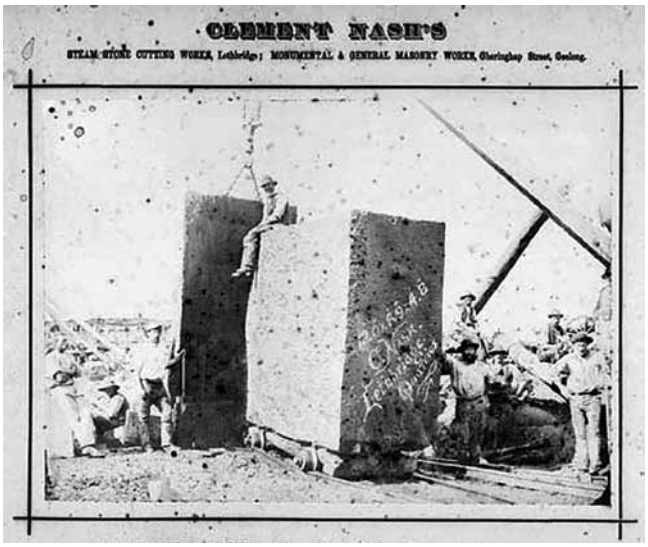
Many early Victorian construction projects relied upon bluestone, found extensively across central and western Victoria and admired for its high quality and durability. Numerous fine public and private buildings, road and railway bridges were constructed from this material. The Lethbridge quarry provides insight into the use of stone close to the construction site and how the quarry developed beyond its original task.

The Geelong to Ballarat Victorian Railways (VR) line was constructed between 1858 and 1862 and required extensive local stone. Opened in 1858 to supply much of the stone used in bridges, culverts and buildings, the quarry, one mile north of Lethbridge, was only discovered after the contract had been let for construction of the railway line; the layer of high quality bluestone started just below ground level and was 20ft thick.[1] The quarry was immediately adjacent to the railway line and stone was dressed at the quarry site before being transported to its required destination.

At first, the quarry was under the control of Evans, Merry & Co, the contractor in charge of building the railway, which then let individual quarry spaces to over 20 separate sub-contractors. It seems that the construction railway and tramway within the quarry were of the same gauge, the construction railway being 5ft 3in gauge. '*From each of these quarries issues a tramway connecting with the main line of railway, so that trucks loaded in the quarries can be placed on the line with the greatest facility*.'[2] By April 1860, Evans, Merry & Co had run into financial difficulty and the contract passed to Messrs Williams & Little. The quarry supplied not only dressed stone, but also ballast, crushed from stone spall left from the dressing. Six stone crushers were installed, the ballast produced fell directly to wagons waiting beneath.

Large quantities of bluestone were used to construct the Moorabool River viaduct, a 1400ft long bridge of stone piers and steel deck. The piers were estimated to require 35,000 tons of stone, which all had to come from the quarry, some 14 miles to the west. Once at the edge of the Moorabool Valley, the finished blocks were lowered to the valley floor via a self-acting incline 350ft long.[3] A tramway then ran across the valley floor and over the river, allowing stone to be taken directly to the bridge pier under construction before being lifted into place. Another incline on the other side of the valley enabled materials, wagons and even locomotives to be taken across the valley prior to completion of the viaduct.

Once the VR line from Geelong to Ballarat was completed, the quarry lapsed into disuse before it was taken over by Clement Nash (later Nash & Son) around 1869. The multitude of working faces opened by the sub-contractors during the railway construction period would have provided a great business opportunity for him. The main quarry output was dressed stone for building construction, much of it being railed to Melbourne. He spent nearly £1000 for a 14hp engine, stone saws and a modern stone crusher. The crusher enabled him to convert stone spall into crushed rock used primarily for road construction in the Geelong region. This product was loaded directly from the crusher into railway wagons parked in the VR quarry siding. While the stone and crushed rock was admired for its high quality, the cost of railway transport was considered too high and many deputations were made to the Railway Department from end users, including the Geelong City Council, to have the freight rates reduced.



Stones used in Railway Buildings. VPRS 12800/P1, item H 2720. Reproduced with the permission of the Keeper of Public Records, Public Record Office Victoria, Australia.

Capable of producing very large single pieces of stone, the largest one sent from the quarry was noted as a 20-ton block for the base of a crane on the banks of the Yarra River. A visitor to the site in 1877 noted '*The quarries during working hours present quite an animated appearance. There are tramways extending in several directions, on which are trollies for carrying the stone to the railway siding, …*'[4]

A bold development proposal appeared in 1913 with a plan to build a mile long 2ft 6in steam tramway from a quarry operated by D Taylor. The tramway was to transport stone to the crusher in Nash's quarry and was being surveyed in August of the same year.[5] The proposal probably came to nothing as it was never mentioned in the papers again.

The closing date of the quarry is unknown, but records show that the VR siding was retained following the conversion of the main line from double to single line in 1934. The VR freight bill for 1937 came to £486, indicating there was still quite a bit of traffic out of the siding but was noted as '*out of use and points spiked*' in 1955.[5] The sprawling quarry site, complete with the brick chimney of the engine house still intact, can still be clearly identified from aerial photography at -37°57'15.09"S 144° 7'21.37"E

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The 2014 Crush

Queensland's sugar industry is a massive enterprise, with cane covering more than 345,000 Hectares of the state. From Childers in the south, to Mossman at the northern extremity, a major series of 2ft and 3ft 6in gauge railways move the freshly cut cane to mills for sugar extraction as quickly as possible. These extensive networks boast around 4000km of track and 250 locomotives, which see service from June to December each year carrying around 36 million tonnes of cane. Here is a selection of photos of this year's operations.

Top left: *Dropping down from Cordalba hill on the double track mail line between there and Isis Mill is Walkers B-B DH 5 (617 of 1969 rebuilt Walkers 1998) on 8 October. Photo: Lincoln Driver* • ***Above:*** *Proserpine Mill's Clyde 0-6-0DH 7 (65-442 of 1965) parallels Queenland Railways trackage with a rake of fulls from the Up River line on 26 October. Photo: Luke Horniblow* • ***Above right:*** *Farleigh Mill's EM Baldwin B-B DH* Hampden *(6706.1 5.76 of 1976) with 70 x 6 tonne bins at Agius Loop on 2 October. Photo: Hayden Quabba* • ***Right:*** *Crossing the North Johnstone River bridge at dusk on 19 October are South Johnstone Com-Eng multi unit 0-6-0DH locomotives 1* Josephine *(A1821 of 1957) and 10* Russell *(A2027 of 1958). Photo: John Browning* • ***Below:*** *Isis Mill Walkers B-B DH 1 (602 of 1969 rebuilt Walkers 1991) waits on the main line while Walkers B-B DH 5 (617 of 1969 rebuilt Walkers 1998) enters the Forestry siding on 8 October. Photo: Lincoln Driver* • ***Below left:*** *Proserpine Mill's Walkers B-B DH 14 (701 of 1972 rebuilt Bundaberg Foundry 1998) at Deambrogio siding on the line south to Elaroo on 26 October. Photo: Luke Horniblow*

A yacht rests on a transfer cradle, between Lake Butler and Guichen Bay, 1950. Today, the scene is vastly different – Lake Butler is a marina with dozens of boats moored and the area in the foreground is a large hardstand often with many fishing boats stored or under repair. The area beyond the lake's far shore is covered in houses and mansions from Robe's recent expansion. Courtesy State Library of South Australia – B50155

Lake Butler slipway and portage railway at Robe

Phil Rickard

In a recent issue of *Light Railways* I reported my findings from a brief visit to Robe, in the South-East of South Australia (LR236, April 2014). On the shores of Guichen Bay I had noted the remains of a broad-gauge slipway tramway that I suggested had once run between the sea and the adjacent Lake Butler. Further, I stuck my neck out and said it was of 1.6m-gauge (5ft 3ins). Within a few days the society's SA convenor Les Howard contacted me to advise that the late Arnold Lockyer had noted the gauge as 6ft. I recently had the opportunity to pass that way again and this time took a tape measure to check the gauge (rather than using my shoes, which I can only conclude are larger than I thought!). And, yes, I was wrong – the gauge is definitely six feet (1.829m).

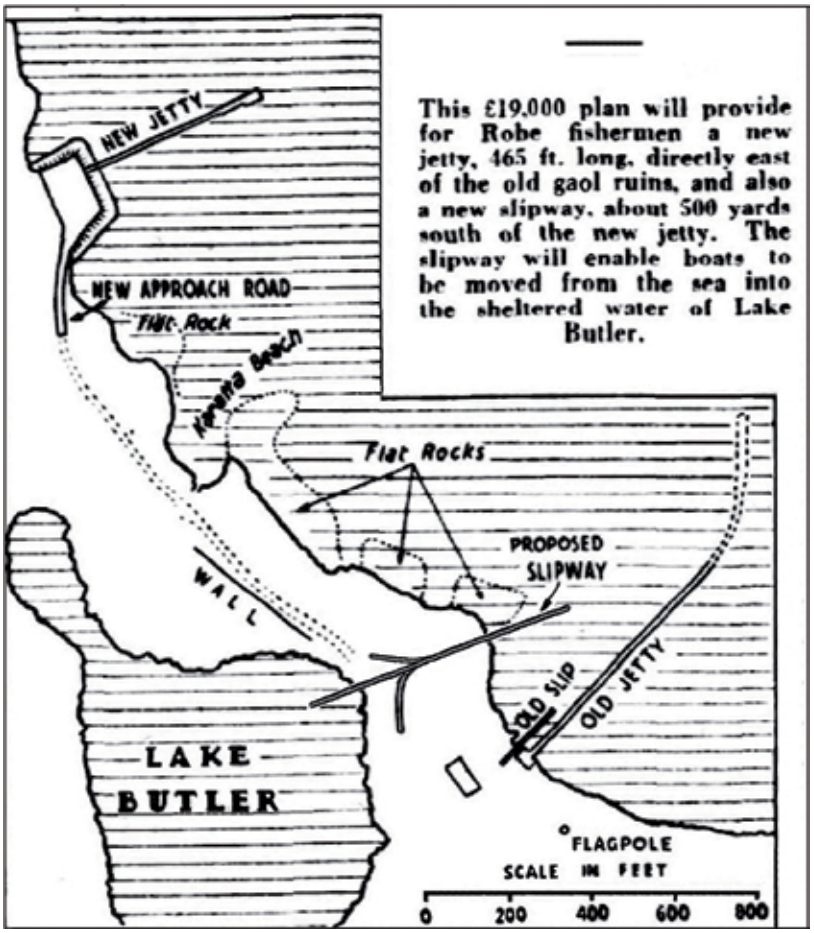
The idea of using Lake Butler to provide a safe anchorage for the local crayfishing boats seems to have originated in mid-1943 as one of a number of proposals to the SA government for post-war works in the South-East. At a meeting of the Robe District Council it was proposed that a canal be built to connect Guichen Bay to Lake Butler – the cost was estimated at £11,000.[1] The following year an alternative idea of a slipway was mooted, no doubt because it was cheaper and thus more likely of attracting government support. That proposal entailed repairing and extending the current slipway ["old slip" on the 1949 map, opposite] over the dunes to the lake.[2] Discussion ensued for several years until, in June 1948, the South Australia premier Thomas Playford announced that a slipway would be built[3] and in September further details were announced; the cost was estimated at £9200, which included a (rubber-tyred) tractor for haulage and the fishermen would be subject to a scale of charges for using the slip.[4]

In early 1949 final plans emerged. Rather than extending the old slipway, a new purpose-built slipway would be built, able to handle vessels of up to 65ft in length. A new jetty would also be built to replace the old one in town. As well as providing accommodation for vessels in bad weather, the 6ft gauge slipway tramway would have two sidings to enable vessels to be repaired locally instead of being taken to Port Adelaide.[5] Construction started in early 1950; the new jetty, complete with a 2ft 6in-gauge tramway, was ready by July 1950 and the slipway finished by September.[6] An electric winch was installed as slipway tramway motive power in lieu of the original tractor idea.

Some initial teething troubles with the slipway (boats falling off the cradle)[7] were encounted, which led to renewed calls for the canal project to be implemented.[8] By the winter of 1954, despite the complaints, more than 45 fishing boats used Lake Butler as a mooring, and the slipway tramway branch spurs for repairing purposes. As is evident from the 1949 map, the new jetty required an access road which joined an existing, rather inadequate track which had to cross the slipway. Finally in September 1954 the SAHB advised the Robe DC that the track would be repaired and a double level crossing of the new slipway railway would be constructed[9], an extremely rare situation in Australia. The canal proposal finally became a

reality in 1964 and most of the slipway tramway was removed to make way for the present hardstand, leaving just some timbers and rails jutting into Guichen Bay. As to the question of whether it was a slipway tramway or a portage railway (LR237, p.23) – I'd suggest that it was a combination of both, as it transferred boats from one water body to another, in addition to shunting boats into one of the branch lines for other purposes!

I have located a South Australian Harbors Board plan No 59/121 "Proposed Canal to Lake Butler" which includes the slipway. The plan is dated 1959 but seems to have been drawn in 1956. Length of the slipway rail track from end-to-end is 251m, which, when added to the two sidings of about 114m gives total track length of 365 metres. Unfortunately the plan is too 'muddy' to permit reproduction but our editor has drawn the attached plan with the salient details. Additionally, the State Library of SA has several photos showing the portage line in operation. A very interesting scene, dated 1950, is reproduced here. At least two other photos of the slipway - B63241/113 and B63241/114 – can be seen online at the SLSA.



1. *Naracoorte Herald* 27 June 1943
2. *Border Watch*, Mt Gambier 14 December 1944
3. *Border Watch* 19 June 1948
4. *Naracoorte Herald* 13 September 1948
5. *The Advertiser*, Adelaide 12 February 1949
6. *News*, Adelaide 12 July; 6 September 1950
7. *Naracoorte Herald* 7 June 1951
8. *Naracoorte Herald* 16 Jul; 15 Oct 1951
9. *Naracoorte Herald* 13 Sept 1954

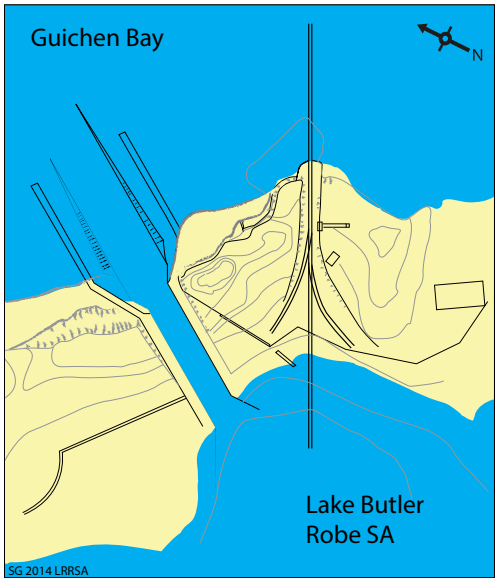


Diagram showing the 6ft gauge slipway and branches, condensed from SAHB plan No. 59/121, prepared to show the placement of the proposed canal, to replace the slip. Scott Gould

Above: Overview of the Robe proposals. The main town is to the lower right. The Advertiser, *Adelaide, 12 February 1949.*

Right: Remains of the 6ft gauge slipway and portage railway on the shores of Guichen Bay, Robe. Built in 1950, it connected the sea to Lake Butler. Behind the photographer a cutting, about 3m deep, runs a short distance through the sandhills to the present hardstand area fronting Lake Butler. 2 August 2014. Photo: Phil Rickard

Industrial Railway NEWS

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Special thanks to contributors to the *Sugar Cane Trains/Navvy Pics 2ft* Facebook page.

NEW SOUTH WALES

RICHMOND VALE RAILWAY

(see LR 229 p.33)
1435mm gauge
By late October, the former Richmond Vale control tower and crew area buildings had all been demolished to make way for new coal sidings.
Brad Peadon 10/14

QUEENSLAND

BUNDABERG SUGAR LTD, Bingera Mill
BUNDABERG SUGAR LTD, Millaquin Mill

(see LR 239 p.24)
610mm gauge
Bingera Mill's Com-Eng 0-6-0DH *Tegege* (FD4799 of 1966) was on loan to Millaquin Mill early in October to cover for EM Baldwin B-B DH *Vulcan* (5317.1 11.73 of 1973) which was out of action due to a failed final drive. Vulcan returned to service on 8 October.
Bundaberg Sugar has been planting more cane in the Manoo/Sandy Creek area which had previously been used for cattle grazing.
Lincoln Driver 10/14

Clairview

(see LR 186 p.21)
610mm gauge
Located on a property at Clairview, south of Mackay, is Fowler 4wDM 21914 of 1936 which was originally at Plane Creek Mill. At this location, the loco minus its gearbox was used to power a saw bench direct from its motor. It has now been sold into preservation and was awaiting removal in September.
Brian Millar 9/14; Scott Jesser 9/14; Luke Horniblow 9/14

CURTAIN BROTHERS (QLD) PTY LTD, Townsville

(see LR 202 p.18)
1067mm gauge
Listed for sale on 15 September were four Walkers B-B DH locomotives which have been stored at two locations in South Townsville since 2008. They are ex Tasrail Emu Bay units 1103 (640 of 1970), 1104 (641 of 1970), 1106 (658 of 1971) and 1107 (659 of 1971). By late October, they had been listed as sold.
Gumtree website 9/14, 10/14

MACKAY SUGAR CO-OPERATIVE ASSOCIATION, Mackay mills

(see LR 238 p.24)
610mm gauge
Racecourse Mill's Clyde 0-6-0DH *Te Kowai* (56-103 of 1956) was seen on temporary transfer to Farleigh Mill's Pleystowe depot late in September. This is Mackay Sugar's oldest working locomotive.
Scott Jesser 9/14

MSF SUGAR LTD, Mulgrave Mill

(see LR 239 p.24)
610mm gauge
On 19 October, the name of Com-Eng 0-6-0DH 8 (A1926 of 1958) was seen to be spelled *Charringa* on the loco and not *Charinga* as previously noted.
Com-Eng 0-6-0DH 26 *Meringa* (AK3675 of 1964) was nearing the end of a rebuild late in October. It has been fitted with a new Scania motor and Allison transmission. As well, a new cab and Mulgrave Mill style hood have been fitted.
Com-Eng 0-6-0DM 5 (A1005 of 1955) would seem to be assigned to the navvies this season. On 30 August, it was seen with a ballast hopper on the Happy Valley line. On 20 October, it was seen with a small ballast train at Dinner Creek Road, north of Garradunga on the South Johnstone system.
Danny Nolan 10/14; Luke Horniblow 8/14; John Browning 10/14

MSF SUGAR LTD, South Johnstone Mill

(see LR 239 p.25)
610mm gauge
Late in August, a derailment at Karpers between Silkwood and Cowley caused the coast route to the mill for cane from the Silkwood and Japoon areas to be closed for a few days. Until the line was reopened, cane from these areas was hauled via the inland route over the 8 Mile Range which has been little used in recent years. Several of the mill's multi unit Clyde and Com-Eng 0-6-0DH's were utilised for this work.
Clyde 0-6-0DH 12 (55-60 of 1955) has undergone a rebuild which includes a new hood similar in style to those at Mulgrave Mill. It has been fitted with a Cummins motor and an Allison transmission. Although the rebuild was completed in September, it had apparently seen very little use by late October.
EM Baldwin B-B DH 25 (6470.1 1.76 of 1976) was taken out of service in September because of a failed reversing gearbox and the opportunity

The Farleigh Mill slave train comes into Ossa 2 on 25 October with Walkers B-B DH Cedars *(693 of 1972 rebuilt Walkers 1997) at the front. Photo: Steven Jesser*

Top: *Ex Plane Creek Mill Fowler 4wDM 6 (21914 of 1936) at Clairview on 27 September. Photo: Scott Jesser* ***Centre:*** *SVictoria Mill's EM Baldwin 4wDH* Sugarworld Shuttle *(9109.1 9.80 of 1980) propels the Lucinda Sugar Terminal's Com-Eng 0-6-0DH (G1023 of 1958) back to the workshop for repairs on 4 October. Photo: Luke Horniblow* ***Above:*** *South Johnstone Mill's Clyde 0-6-0DH 12 (55-60 of 1955) in the loco storage shed on 22 September following its rebuild by the mill. Photo: Luke Horniblow*

was then taken to fit it up for remote control working. It is expected to be unavailable for the balance of the season.

Clyde 0-6-0DH 14 (63-288) and 15 (66-491) were seen to be stationed at the Silkwood depot in October with the latter being the spare loco there.

Luke Horniblow 9/14; Dave Chapman 9/14; John Charleton 9/14; Jason Sou 9/14, 10/14; John Browning 10/14

SUGAR TERMINALS LTD, Lucinda

(see LR 236 p.24)

610mm gauge

The terminal's Com-Eng 0-6-0DH (G1023 of 1958) failed on 4 October with transmission problems. It was promptly replaced the same day by EM Baldwin 4wDH *Sugarworld Shuttle* (9109.1 9.80 of 1980) on loan from Victoria Mill and this loco was moving rakes of up to 24 sugar boxes to the unloading station from the marshalling yard. It was in use here until late in October when the Com-Eng returned to service.

Luke Horniblow 10/14; David Mewes 10/14; Editor 10/14

TULLY SUGAR LTD

(see LR 238 p.26)

610mm gauge

This mill was taking delivery of new 10 tonne bogie bins built by Bradken in Boogan during August and September.

The mill's Plasser tamping machine (433 of 1997) returned from complete overhaul and refurbishment at HMA Techniplan in Brisbane on 29 September where it had been since September 2013. This overhaul had cost $1.6 million.

Robert Shepherd 8/14; Luke Horniblow 8/14; *The Tully Times* 2/10/2014

WILMAR SUGAR (HERBERT) PTY LTD, Herbert River Mills

(see LR 239 p.25)

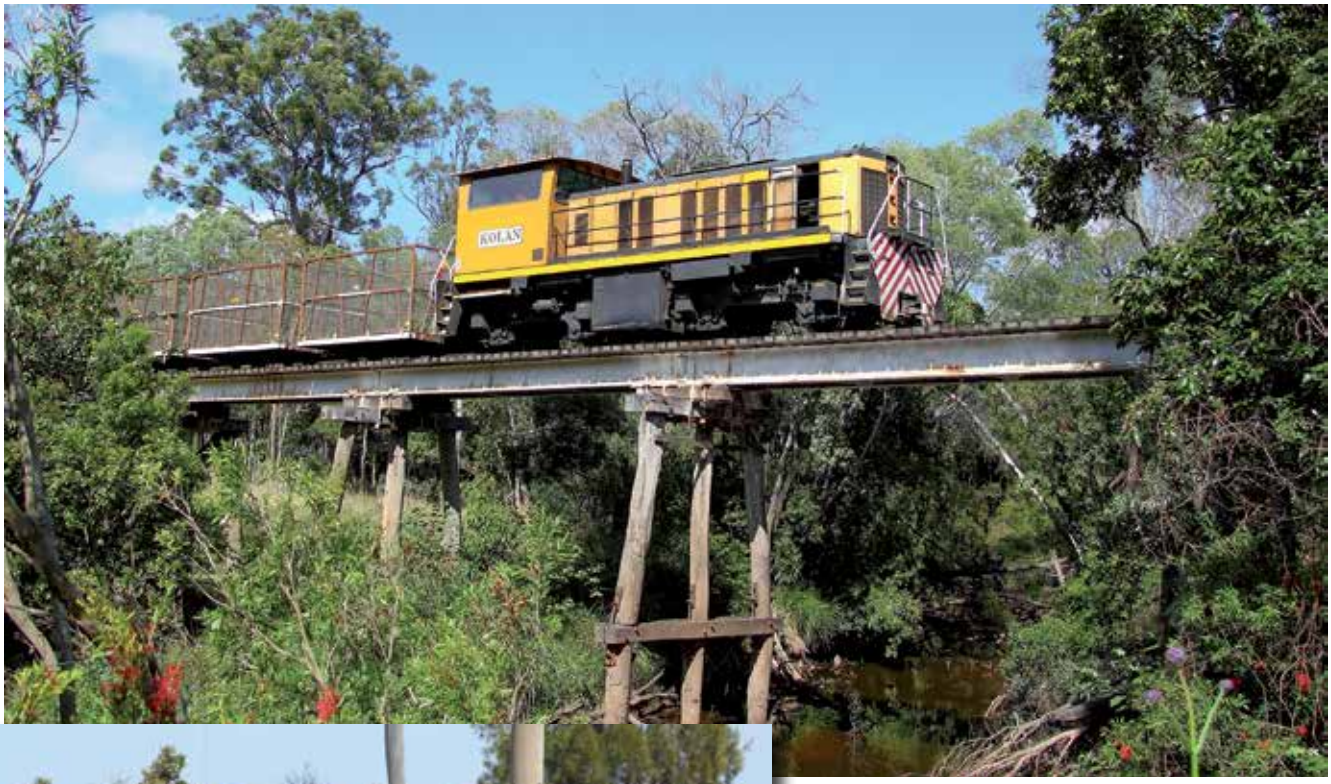
610mm gauge

With Victoria Mill's EM Baldwin B-B DH *Rynne* (5423.1 9.74 of 1974 rebuilt N+P Site Boring 2009) being temporarily out of action with a failed final drive, the opportunity was taken to loan its Solari bogie brakewagon of 1994, *BVAN 3*, to Macknade Mill from late in August to 16 September where it was paired with EM Baldwin B-B DH 19 (7070.3 4.77 of 1977).

Victoria Mill's Clyde 0-6-0DH *Canberra* (65-433 of 1965) was once again on loan to Macknade Mill from sometime in September until at least 31 October.

Victoria Mill's EM Baldwin 4wDH *Sugarworld Shuttle* (9109.1 9.80 of 1980) went on loan to the Lucinda sugar terminal from 4 October to cover for a loco breakdown there. It was in use there until late in October.

On 11 October, Victoria Mill's Hudswell Clarke 0-6-0 *Homebush* (1067 of 1914) hauled passenger trains on the Nyanza line for the annual Maraka Festival. The locomotive's centenary was also officially commemorated this day with a plaque being unveiled on the side of the tender and as well *Salute to the Hudswells*, a history of CSR's Hudswell Clarke locos, was launched.



Above: *Bingera Mill Walkers B-B DH* Kolan *(633 of 1969 rebuilt Bundaberg Foundry 1996) at Splitters Creek on 13 October. Photo: Lincoln Driver*
Left: *Bingera Mill's Com-Eng 0-6-0DH* Tegege *(FD4799 of 1966) at Elverys on 7 October while on loan to Millaquin Mill. Photo: Lincoln Driver*
Below: *Isis Mill EM Baldwin B-B DH 11 (10130.1 6.82 of 1982) passes through Cordalba on 8 October. Photo: Lincoln Driver*

Top: *On 4 October, Macknade Mill's EM Baldwin B-B DH* Darwin *(6171.1 9.75 of 1975) approaches Gairloch Road on the Hawkins Creek line. Photo: Hayden Quabba* ***Centre:*** *Proserpine Mill Clyde 0-6-0DH 3 (58-195 of 1958) at Glen Isla on 19 October. Photo: Steven Jesser* ***Above:*** *At the south end of South Johnstone Mill's Sandy Pocket Loop, Com-Eng 0-6-0DH 39 (AH4688 of 1965) waits to proceed south with empties as EM Baldwin B-B DH 24 (5477.1 8.74 of 1974) arrives from Cowley with fulls. Photo: John Browning*

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Seen being assembled in the Victoria Mill truckshop on 11 October, were a number of new bogie 11 tonne bins. These have been built to a stretched 8 tonne bin design although the ends are vertical instead of being angled out.
Luke Horniblow 10/14; Editor 8/14, 9/14, 10/14

WILMAR SUGAR (PLANE CREEK) PTY LTD, Plane Creek Mill, Sarina
(see LR 239 p.26)
610mm gauge
At about 1.30am on 5 September, an outbound train from the mill collided with a rake of seventy full bins which had been illegally released by trespassers from the bin storage yard at Shannon's Flat. The loco crew were unable to avoid colliding with the bins but were able to slow down enough to prevent it being too serious.
Plasser ballast tamping machine 415 of 1995 (not Tamper 4375595 of 1975) was still on loan to Proserpine Mill late in October.
Luke Horniblow 10/14; *Daily Mercury* 5/9/2014

WILMAR SUGAR (PROSERPINE) PTY LTD, Proserpine Mill
(see LR 239 p.26)
610mm gauge
Only three of the original eight Clyde 0-6-0DH's are left serviceable at this mill, these being 3 (58-195 of 1958), 5 (60-218 of 1960) and 7 (65-442 of 1965). Clyde 0-6-0DH's 6 (62-272 of 1962) and 8 (65-443 of 1965) are stored out of use.
A B-double fuel tanker collided with a train of empty bins being propelled across the Bruce Highway and into the Harry Biggs siding at Foxdale on the night of 6 September. No one was injured but there was extensive damage to the truck and bins.
More information has come to light about the tamping machine on loan from Plane Creek Mill. It is actually Plasser 415 of 1995 and not Tamper 4375595 of 1975 as previously reported. It was transported here on 14 July and was still on loan late in October.
Luke Axiak 7/14; Mitch Zunker 7/14; Steven Jesser 10/14; Tom Badger 10/14; Luke Horniblow 10/14; *Whitsunday Times* 11/9/2014

OVERSEAS

FIJI SUGAR CORPORATION
(see LR 239 p.27)
610mm gauge
First up is John Browning's comprehensive report from his visit to Fiji in early September and there have been many changes during the past couple of years.

The three Fijian sugar mills on the principal island of Viti Levu (Lautoka, Rarawai and Penang) as well as Labasa mill on Vanua Levu. Lautoka and Rarawai mills are interconnected by rail.

It appears that some headway is being made to reverse a number of years of neglect of the rail system (and of the industry generally) and to reduce the use of road transport to bring cane to the mills. In the 2014 season, the amount of cane crushed has increased from 1.6m in 2013 to 1.85m tons, and the tonnes of cane to tonnes of sugar ratio has improved to around 8.2:1 from a disastrous 14:1 in 2010.

An Australian consultant, Lindsay Wheeler, has been responsible for the importation of seven secondhand locomotives from Bundaberg Sugar in the last few years. One was rebuilt in Innisfail with automatic transmission by IBS Engineering, and since then two further locomotives previously rebuilt by Ontrak have also been fitted with this type of transmission by IBS, at Lautoka Mill. It is considered that the Ontrak design was less suitable for Fiji conditions, where high-speed running is not desirable.

A small amount of chopper machine harvesting of cane at each mill is occurring in 2014 but road transport is being used to convey the chopped cane to the mills. It is doubtful whether under current circumstances the rail system could guarantee the prompt delivery required in order to avoid the chemical deterioration that causes processing problems at the mill if chopped cane is not crushed within 24 hours of harvesting.

However, given that the cane truck fleet is in poor condition and that replacement of rolling stock will be an important part of any rehabilitation program, 10 used bin chassis with Willison couplers have been imported from Australia for evaluation. They were noted stored near the Lautoka loco shed and have been identified as ex-Fairymead Mill.

Following the democratic election held in mid-September 2014, there are high hopes of overseas assistance funds becoming available to invest in track renewals including the rebuilding of the Sigatoka bridge that was damaged in a flood in 2009 and brought about the closure of 45km of the Lautoka main line.

It is suggested by local staff that a significant threat to the continuation of rail transport in the long term is sea level rises due to global warming. There is much track built through mangrove swamps along the coastlines and more frequent flooding of these lines is being reported.

Lautoka Mill

Further locomotive scrappings have taken place and three locomotives are derelict at the mill. Two newly-arrived Baldwin locomotives from Bundaberg Sugar are in use while two other locomotives were sent to Labasa this season in exchange for two Ontrak rebuilds.

A summary of recent roster changes is as follows:

Disposed of for scrap in 2014:

2	0-6-0DH	Clyde	57-146	1957
5	0-6-0DH	Clyde	58-189	1958
16	4wDH	Simplex	122U157	1975

Dismantled and derelict at the mill:

9	0-6-0DH	Clyde	64-380	1964
16	0-6-0DH	EM Baldwin	5058.1 5.73	1973
22	0-6-0DH	Clyde	59-204	1959

Secondhand locomotives that arrived from Queensland late in 2012:

21	0-6-0DH	Clyde	57-159	1957
	ex Millaquin Mill. Based at Navo.			
55	0-6-0DH	Clyde	DHl.6	1954
	ex Bingera Mill. To Labasa 2014.			

Secondhand locomotives that arrived from Queensland in 2014:

16	0-6-0DH	EM Baldwin	6/1257.1 7.65	1965
	ex Bingera Mill. Based at the mill.			
20	0-6-0DH	EM Baldwin	3406.1 7.70	1970
	ex Bingera Mill. Based at Navo.			

Transferred from Labasa in 2014:

13 *Chilli*	0-6-0DH	EM Baldwin	9942.1 4.81	1981
	rebuilt Ontrak		2435-1	2009
	based at the mill.			
15 *Oscar*	0-6-0DH	Clyde	56-91	1956
	rebuilt Ontrak		2434-2	2009
	awaiting repairs.			

Transferred to Labasa in 2014 (with number 55):

20	0-6-0DH	Clyde	64-385	1964

Navo depot south of Nadi is the base for the majority of active main-line locomotives with five normally stationed there, running south to Batiri and north to the mill, although cane transfers with mill locos also occur at other points along the line between Nadi and Lomolomo. This is reflected in crew shift change points for Navo-based locomotives being at

On 5 September, Labasa Mill's EM Baldwin 0-6-0DH 14 (4413.3 9.72 of 1972) heads south beside the picturesque Wainikoro River at Daku Triangle. Photo: John Browning

Na Savu Savu, Navo, Natova and Lomolomo. Three main-line locos were noted active at the mill, with two Clyde HG-3R locomotives nominally spare, although one was in use during the visit to cover a breakdown.
The active main line locomotives not listed above are:

10	0-6-0DH	Clyde	65-437	1965
	spare			
11	0-6-0DH	Clyde	65-432	1965
	Navo			
12	0-6-0DH	Clyde	65-431	1965
	spare/in use			
14	0-6-0DH	Clyde	68-655	1968
	Navo			
23 *Howie*	0-6-0DH	Clyde	59-202	1959
	rebuilt Ontrak		2434-1	2008
	Navo			
24 *Brandy*	0-6-0DH	Clyde	57-140	1957
	rebuilt Ontrak		2435-3	2012
	based at the mill			

Line cars for rail maintenance were noted at Navo (number 122) and Natova (123 & 124), with one (121) under repair at the mill and one out of use at Cuvu depot (number 5). It is believed that line cars are also based at Lomawai (120) and Tavarau (125). One self-propelled chain-tightening machine is based at Navo loop. Three Simplex Mechanical Handling locomotives, numbers 13, 14 and 15, continue to work in the mill yard.
A small Chinese ballast tamper was obtained in 2013. It was built by Shifang Railway-Helper Machinery Co Ltd in Sichuan. It is housed in a special small shed at the Civil Engineer's depot close to the mill. Details are Model XYD-2N, Serial No.2, Serial Date 2013.01. Two bogie ballast hoppers that had been out of use for many years have been refurbished for use with the tamper.

Rarawai Mill

Only two Hunslet locomotives are now in use, which is a disappointment to crews, with whom they are popular. Three locomotives are based at Tavua depot, with one of them nominally spare.
A nice touch is that the two locomotives obtained from Bundaberg Sugar in late 2012 have retained their Queensland numbers. In addition, the entire fleet at Rarawai has been repainted in imitation of Bundaberg Sugar livery. No locomotives have been scrapped since 2012 but two more have become derelict.
The following locomotives are dismantled and derelict at the mill:

3	0-6-0DH	Clyde	55-62	1955
6	0-6-0DH	Clyde	57-157	1957
7	0-6-0DH	Clyde	57-175	1958
18	6wDH	Hunslet	9285	1987
20	6wDH	Hunslet	9087	1982

The following locomotive is dismantled for repairs in the locoshed:

25	4wDH	Diema	5170	1991

The following secondhand locomotives arrived from Queensland in late 2012:

56 *Hinkler*	0-6-0DH	Clyde	56-89	1956
	ex Bingera Mill, Qld. Based at Tavua			
60	0-6-0DH	Clyde	60-219	1960
	ex Bingera Mill, Qld. Based at the mill.			

The following additional locomotives were also working out of Tavua depot:

22	6wDH	HE	9274	1987
28	0-6-0DH	Clyde	55-66	1955
	nominally spare			

The following additional locomotives are based at the mill and available for use:

8 *Bozley*	0-6-0DH	Clyde	62-271	1962
	rebuilt	Ontrak	2435-2	2011
9	0-6-0DH	Clyde	64-378	1964
10	0-6-0DH	Clyde	64-384	1964
	spare			
17	4wDH	EM Baldwin	5060.1 9.73	1973
	weighbridge			
21	6wDH	HE	9273	1987
24	0-6-0DH	Baguley-Drewry	3773	1983
	empty yard/truck shop			
27	0-6-0DH	Clyde	56-113	1956

The line car based at Tavua was awaiting repairs but the one based at the mill was seen in action several times.
John Fowler 0-6-2T 10 (11458 of 1908), formerly number 8, remains on display outside the mill gate in very complete condition with cab fittings intact.

Penang Mill

This mill has only a small rail system, but it has a charm all of its own. The situation here was similar to that found in 2012. Clyde 0-6-0DH 21 (58-191 of 1958) was in the shed requiring gearbox repairs and the other locomotives were in use as follows:

3	4wDH	EM Baldwin	5060.2 9.73	1973
9	0-6-0DH	Baguley-Drewry	3772	1983
10	4wDH	Diema	5172	1991
		yard shunter		

Drewry 0-6-0DM 8 (2727 of 1964) remains dismantled and dumped in the full yard while Hudswell Clarke 0-6-0 4 (1658 of 1935) remains on display.

Labasa Mill

Operation of the line along the coast to the east of the mill remains a major challenge, with a single round trip from the mill to Nubu taking around 20 hours, with crew changes done by road vehicle. A large number of disused locomotives have recently been scrapped and two have been swapped with Lautoka Mill. This process is now relatively easy, with roll on / roll off ferry services to Viti Levu being available.
In 2014, the following locomotives were disposed of for scrap:

1	4wDM	Motor Rail	11288	1965
6	4wDH	Hunslet	9284	1987
7	4wDH	Diema	5171	1991
18	0-6-0DH	Baguley-Drewry	3770	1983
19	0-6-0DH	Clyde	58-197	1958
20	0-6-0DH	Clyde	57-149	1957

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In addition, the following locomotive has been dismantled:

10	0-6-0DH	Clyde	64-320	1964

In 2013, a newly refurbished locomotive arrived from Queensland:

16 *Damo*	0-6-0DH	Clyde	65-441	1965
	rebuilt IBS 2013 ex Millaquin Mill.			

In 2014, two locomotives were sent to Lautoka Mill:

13 *Chilli*	0-6-0DH	EM Baldwin	9942.1 4.81	1981
	rebuilt	Ontrak	2435-1	2009
15 *Oscar*	0-6-0DH	Clyde	56-91	1956
	rebuilt	Ontrak	2434-2	2009

In exchange, two locomotives were sent from Lautoka Mill to Labasa in 2014:

17	0-6-0DH	Clyde	DHI.6	1954
	ex Lautoka Mill 55			
21	0-6-0DH	Clyde	64-385	1964
	ex Lautoka Mill 20			

All other main line locomotives were in use on cane haulage as follows:

8	0-6-0DH	Clyde	DHI.8	1955
9	0-6-0DH	Clyde	62-270	1962
11	0-6-0DH	Clyde	64-319	1964
12	0-6-0DH	EM Baldwin	5995.1 1.76	1976
14	0-6-0DH	EM Baldwin	4413.3 9.72	1972

EM Baldwin 4wDH 4 was back in service in the empty yard. It and similar locomotive 5, used at the weighbridge, have been fitted with GM 71-series 4-cylinder engines. The precise identity of these locomotives is unknown but they were rebuilt at Labasa in 1980 and are among the six tunnelling locomotives built to EM Baldwin serial 3229 in 1969-70.
Two diesel line cars are in use for track maintenance, based at Waiqele and Wainikoro, while a third, normally stationed at Nagigi, was at the loco shed for repairs. The derelict Plasser KMX-06 ballast tamper (63 of 1974) seems to have escaped the scrap dealer's attentions and is still in the mill yard.
John Fowler 0-6-2TT 10992 of 1907 is still displayed near the mill entrance. Its tender incorporates the truncated chassis of John Fowler 0-4-2ST 4788 of 1884.
John Browning 9/14

Chris Stratton made observations during the latter half of September and early October, which have largely backed up John Browning's observations. Additional to John's report are the following observations by Chris.

Lautoka Mill

Clyde 0-6-0DH 12 (65-431) was seen at Navo depot on 15, 16 and 18 September and presumably still in use as opposed to being a spare loco back at Lautoka. On 16 September,

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Cuvu depot was seen to be abandoned and overgrown and the Natadola Beach trackage was also overgrown. Clyde 0-6-0DH 23 *Howie* (59-202 rebuilt Ontrak 2008), normally based at Navo, was seen in the locoshed at Lautoka on 18 September.
Chris Stratton 9/14

Rarawai Mill
Spare loco Clyde 0-6-0DH 10 (64-384) was seen, light engine, heading towards Queens Road on 18 September.
The Tavua depot locoshed has been been removed and replaced by a carport style shed with no sides.
Chris Stratton 9/14

Labasa Mill
This mill had finished crushing by late October with only 3,000 tonnes of cane stood over for next year. The Fiji Roads Authority has undertaken to inform this mill beforehand of any road works affecting tramline crossings they have planned as such road works have proved to be disruptive to the tranport of cane in the past. The Authority has also undertaken to refurbish any road and rail bridges that they were currently using.
The Fiji Times Online 29/10/2014

REPUBLIC OF NAURU PHOSPHATE CORPORATION (RONPHOS)
(see LR 226 p.26)
915 and 610mm gauge
Phosphate mining is continuing but rail operations have been abandoned and there has been little change since Rod Hutchinson's 2012 report. No diesel locomotives were noted but the dismantled Thomas Hill unit may still be at the Central Workshops. As abandoned equipment is to be seen everywhere around this area, it is quite likely that other locomotive remains are present in the verdant undergrowth.
Large numbers of 915mm gauge Kelly & Lewis four-wheel phosphate wagons are scattered around, some positioned to protect power poles from road traffic along the road that was previously the double track main line.
610mm gauge Orenstein & Koppel 0-4-0WT 11586 of 1928 with a v-tipper wagon is still plinthed near the offices close to the wharf. Nearby a brand-new set of wheelsets for a Thomas Hill locomotive was found. These had never made it beyond the wharf area after arriving on the island, with journals still protected by plastic sheeting.
A visit was made to a makeshift gaol constructed by the Japanese utilising an old 2ft gauge railway cutting built through coral pinnacles left when the phosphate was removed. Nearby a 610mm gauge skip frame and its body were noted.
John Browning 10/14

Top: *Ex Bundaberg Sugar Clyde 0-6-0DH locomotives 16 Damo (65-441 of 1965 rebuilt IBS 2013) and 17 (DHI.6 of 1954) at Labasa Mill on 6 September. Photo: John Browning* ***Centre:*** *Seen at Nauru on 18 October was a brand new but never used, pair of wheelsets for a Thomas Hill diesel locomotive that never made it past the port facility. Photo: John Browning* ***Above:*** *In the Republic of Nauru, 2 foot gauge Orenstein & Koppel 0-4-0WT, 11586 of 1928 is on display near the RONPHOS offices on 17 October. Photo: John Browning*

Field Reports

Please send any contributions, large or small, to fieldreports@lrrsa.org.au or to P.O. Box 21, Surrey Hills, Vic 3127.

Gold Mines, Bendigo VIC

Gauge various

A visit in September 2014 to the North Deborah gold mine site (4 Eve Street, Golden Square), revealed a significant quantity of mine rail on site (estimated to be around twelve pounds per yard in weight). It is not currently known how this rail was used. A plaque at the site indicates that this mine was established in May1937 with plant valued at £2000 and operated with a nominal capital of £37,500.

The mine was one of the most successful in the later mining era of Bendigo, producing 128,000 ounces of gold up until its closure in December 1954 as the last operating twentieth century mine in Bendigo. Also on site are a large poppet head with winding wheels, and a brick chimney. The chimney (the only extant mining boiler chimney in Bendigo) was restored in 2006 by Bendigo Mines Limited, operators of the current mine in Bendigo, in recognition of its high degree of heritage significance.

The last boilers connected to this chimney would very likely have been an A. Roberts & Sons of Bendigo Cornish boiler (registered as MDW10 in March 1940), second-hand ex North Blue mine; and a Thompsons of Castlemaine Lancashire Jackass boiler (registered as MDW41 in June 1943), second-hand ex Lightning Hill and South Wattle Gully mines.

Nearby, the Deborah mine site (9 Abel Street, Golden Square) has a number of battery and machinery foundations, as well as a relocated five-head ex-government battery in a semi-open shed. The poppet head is extant, but missing its winding wheels. Behind the battery shed lies a large A. Roberts & Sons of Bendigo Lancashire Jackass boiler built in 1906 (registered as MDW71 in June 1946 to the New Monument Gold Mining Company in Bendigo, and presumably at the Deborah mine by June 1948 when it was re-registered as BIA 10777). The Deborah mine was also hugely successful in the 1930s and 1940s, producing more than 50,000 ounces of gold and a profit of £386,000. Although rail must have been used at this site, there is no sign of such infrastructure today. A restoration project is currently underway at the mine site, so it will be a location to watch in case any in-situ rail is uncovered.

To anyone intending to visit Bendigo and the heritage-listed Central Deborah mine and tram terminus, a detour is recommended to Golden Square to visit these sites, which are only about a kilometre away.

Simon Moorhead 09/2014. Boiler details from PRO, VPRS 9534/P1 (see LR 209, pages 10-12).

At Bendigo, aerial tramways were used to take quartz from the New Moon mine and the South New Moon mine to the large New Moon battery (of 71 heads) for crushing. The stanchions for the aerial tramway had concrete footings, some of which are still extant. A skip repair track, similar to that at the 'Old' Napoleon mine in Bendigo (reported in LR 239, page 31), still exists at the South New Moon mine. It is laid in street tramway rail with the rail heads laid towards the inner sections of the track.

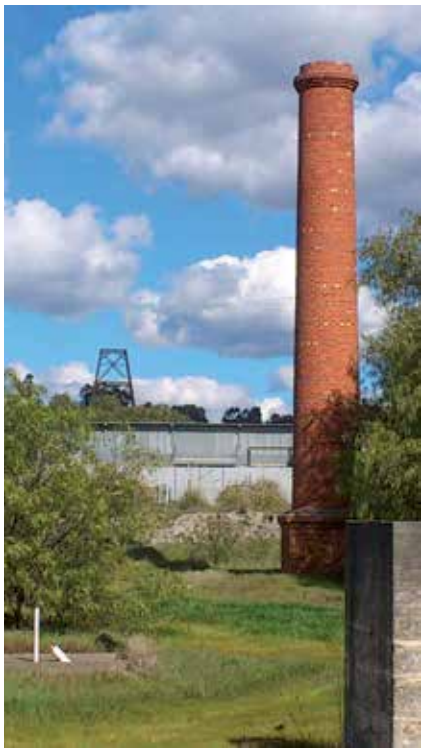
On 1 February 1904, *The Argus* reported that the South New Moon had been the premier producer in the State of Victoria for that year and had paid £208,400 in dividends, the bulk of it in the preceding two years. The mine, like many Victorian mines, closed during the First World War, but was briefly re-opened in the 1930s, and the skip track illustrated probably dates from this latter period.

Chris Wurr 08/2014

Above: Rail at the North Deborah mine site in September 2014.

Below: The North Deborah chimney is the last remaining mine chimney in Bendigo.

Photos: Simon Moorhead;



The skip track at the South New Moon mine. *Photo: Chris Wurr*

LETTERS

Please send letters to:
Editor: Scott Gould
PO Box 21, Williamstown, Vic 3016
e-mail: editor@lrrsa.org.au

Dear Sir,

Hudson Brothers timber tramway (LR 155)

As detailed by Jim Longworth, the Narani sawmill was purchased in 1907 by Frederick Phillips, the proprietor of the Bullock Wharf Sawmill at Nabiac. By July that year the plant was being moved to a new site on the Upper Myall and the following month, Phillips was erecting his new mill on the Myall Road about seven miles from Bullahdelah.[1] In late October 1907, however, his sawmill at Bullock Wharf which fortunately was insured for £500, was totally destroyed in a fire.[2] Phillips applied to Stroud Shire Council in August, 1908 for permission to have a tram line run on part of a road near Upper Myall Road and his application was approved with a yearly rental of twenty shillings payable.[3] Later that year the establishment was apparently referred to as the Skipton Sawmills, Markwell.[4] In December 1909, Phillips was noted as the proprietor of one of the five sawmills located at or near Bullahdelah, his mill then being identified as the Tipton Mills.[5] Timber magnate Allen Taylor was, in late 1909, the proprietor of one of the purported other four sawmills situated at or near Bullahdelah, his mill being situated at Markwell. Philips' sawmill (ex Narani), seems to disappear into the ether after December 1909. However, in early February 1910 Allen Taylor visited the town of Dungog and at the end of that visit departed for Bullahdelah in company with his manager at Bullahdelah, Frederick Phillips.[6] Stroud Shire Council received correspondence from Mr Phillips of Markwell sawmills in June 1911.[7] May the following year saw '*Mr Phillips, manager for Mr Allen Taylor's mill near Bulladehlah*,' offering for sale timber decking suitable for local bridges.[8] Only eleven months later in April 1913, Phillips was saying his goodbyes at Allen Taylor's sawmill at Markwell after several years as manager of that establishment.[9] With regard to the tram line for which Phillips had applied for permission to cross a road, shortly after Council's engineer approved Allen Taylor & Co's proposal to build a tramway from Purgatory Hill to Bullahdelah,[10] in early March 1916 Stroud Shire Council's accountant noticed that the rent for the tramline at Upper Myall was five years overdue![11] Allen Taylor and Co promptly forwarded a cheque, along with advice that the right of the tramline had been transferred to the firm, although Council noted that that was contra to the original tram line agreement.[12]

1. *Dungog Chronicle* - 16 August 1907
2. *Raleigh Sun* - 25 October 1907
3. *Dungog Chronicle* – 12 August 1908
4. *Newcastle Morning Herald* – 1 December 1908
5. *Dungog Chronicle* - 24 December 1909
6. Ibid - 8 February 1910
7. Ibid – 13 June 1911
8. Ibid - 21 May 1912
9. Ibid - 11 April 1913
10. Ibid - 10 March 1916
11. Ibid - 14 March 1916
12. Ibid – Ditto

New light on the construction of the Narani sawmill (LR 155)

A Sydney court case in November 1874 between engineer and wheelwright, William Nelson and Hudson Brothers, throws new light on the construction of the Narani Sawmill. The two parties signed an agreement on 16 October 1873 in which Hudson Brothers of Sydney agreed, '*to pay William Nelson a salary of four pounds weekly in consideration that Mr Nelson gives his services entirely to the proper and most economical making of a sawmill proposed to be erected at Myall Lakes, in the Port Stephens district by Messrs. Hudson Brothers,.....*'[1] Nelson, whose home address was 1 Christie street, Glebe, was sent a telegram by Hudson Brothers while he was working at Narani in December 1873, advising him of his wife's imminent demise.[2] Despite being left a widower with seven children (the eldest being 16 years old), Nelson claimed in the court case that in pursuance of his agreement with Hudson Brothers, he erected the said saw-mill.[3] Hudson Brothers countered that Nelson was not reasonably competent, and after the firm's lawyers demonstrated that they could refute all of Nelson's claims, the parties agreed to discontinue the court case only two days later.[4]

1. *Empire* - 17 November 1874
2. *Empire* - 18 December 1873
3. *Empire* - 17 November 1874
4. *Evening News* - 18 November 1874

Tarbuck revisited

In the obituary of William McBride in September 1931,[1]brief details are provided of his father, Thomas McBride's employment with Hudson Brothers. In 1879, with William only eight years old, his father was sent by the firm from Sydney to its Narani Saw Mills. Prior to his despatch to the Myall Lakes, McBride was head horseman for Hudson Brothers and it is claimed that he was in charge of the team that conveyed the first railway carriage manufactured at Hudson Brothers' works at Clyde to the railway. It appears, however, far more likely that that episode actually occurred at an earlier date at the firm's Redfern works. McBride was sent to Narani in 1879 to be '*in charge of the teams which were to do the hauling from the forest to work the mill from where the cutters were operating at Tarbucka*.'[2] It is clear that the description refers to operations on the Tarbuck Brush to Smith's Lake horse tramway. McBride's despatch to Narani in 1879 correlates extremely well with, in March 1879, a locomotive being noted at work on the tramway between Smith's Lake and the Narani Saw Mills,[3] conveying the logs that had been conveyed on the Tarbuck Brush horse tramway to the shore of Smith's Lake for shipping across to its southern shore and then railed to the Narani sawmill. Thomas McBride stayed at Narani until 1889, when during a depression in the timber trade he moved to, and bought a farm near, Forster.[4] Roughly a decade later, both locomotives used at Narani would follow McBride to Forster where they would work on the southern breakwater at the entrance to Cape Hawke Harbour.

1. *Dungog Chronicle* - 15 September 1931
2. Ibid - Ditto
3. *Sydney Morning Herald* - 10 March 1879
4. *Dungog Chronicle* - 15 September 1931

Ron Madden
Wagga Wagga, NSW

Dear Sir,

Transport & Industrial Index locomotives (LR 239)

I found this article very interesting. I doubt (but could well be not correct) that Goninan built Jeffrey type locomotives. Gibson Battle had the licence (if such an arrangement even existed) to build these units.

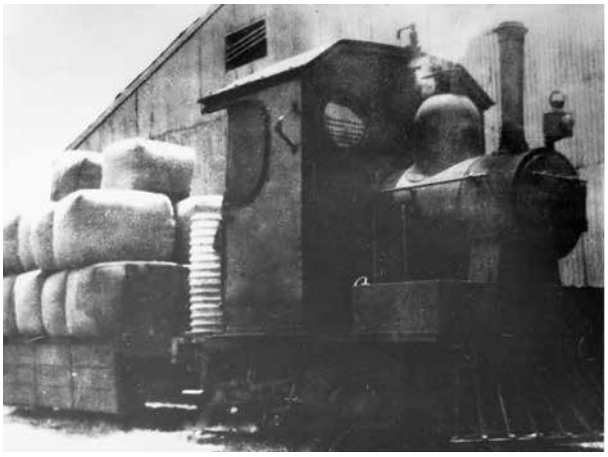
BHP built Jeffrey type battery locomotives, coal cutters and loaders during World War II but I know that for these no licence existed. In fact BHP's legal people found that all this equipment had so much other external input that no licence could be enforceable! BHP just measured up and started building – after all a war had to be won!

Ross Mainwaring
St Ives, NSW

Dear Sir

Beachport Jetty Tramway, Beachport, SA (LR 236, 238)

The map on page 30 of LR 238 shows a branch off the line from the jetty leading to a 'Wool and Grain Store (museum)'. This fine stone building is now occupied by the National Trust of South Australia and the railway entered through its central archway. A photograph of this building, as it is today, can be found on the Trust's website. Attached is a photograph of it when owned by S J Stuckey & Sons or Goldsbrough Mort & Co. Ltd. Standing in front is a train of wool bales, hauled by a small 0-4-0T locomotive, Kitson T97/1884. This locomotive (numbered in Kitson's separate list of tramway locomotives) was built for what became the South Australian Harbors Board, for use at its Port Germein jetty. It was sold to Dalgety & Co. for use on its jetty at Kingston, SA, arriving there on the SS *Kintore* on 3 August 1910. It was transferred to Dalgety's operation at Beachport by 1916, for *The Register* dated 11 March that year noted that the Harbours Board had temporarily withdrawn its prohibition



Left: Kitson T97 of 1884 poses in front of the Beachport grain and wool store. Photo: FB Tillman, Arnold Lockyer collection, NRM Port Adelaide.
Right: Former SAR Kitson railcar motor no longer has its passenger car, but has gained a corrugated water tank on its footplate. Photo: Richard Horne Collection

against the use of Dalgety's small locomotive on the Beachport jetty. Dalgety sold its operation at Beachport to S J Stuckey & Sons in 1928, who in turn sold it to Goldsbrough Mort & Co. Ltd. in 1938. The locomotive's boiler was condemned in May 1937 and it was scrapped by 1948. A second Kitson locomotive was acquired, second-hand from the South Australian Railways, by S J Stuckey for use at Beachport in 1934. This was Kitson 4374/1905, a 2-2-0WT, which had been the motor portion of steam railcar 2. At Beachport, it was fitted with a circular galvanised iron water tank behind the cab. It appears to have been withdrawn c.1941 and was scrapped together with its sister Kitson. A picture of this locomotive is also attached.

Richard Horne
South Croydon, UK

Dear Sir

Tulloch 4wDM (003 of 1959)

In the article on Transport & Industrial Index locomotives in LR 239, John Browning mentions the Tulloch locomotive from the Lake Margaret Tramway. It ran from 1959 until closure in 1964, and I now own and operate this locomotive on my small farm. I write, not on the origins of the locomotive, but on the recent requirement to have its Fordson four-cylinder diesel engine rebuilt. Unbeknown to me at the time this would result in the meeting of a highly skilled man, with the common link being John Browning.

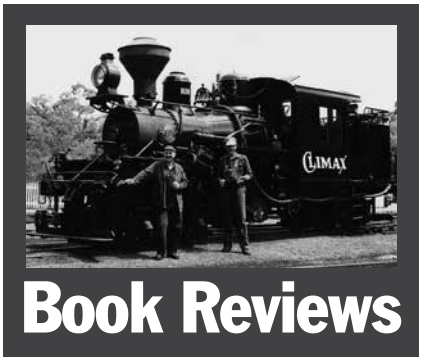
When purchased in 2009 from the Hobart area, the Tulloch locomotive had been partially stripped many years beforehand. After transporting it back to NSW, Bob Johnson, a friend from Victoria, donated an engine from a Fordson Super Major tractor, circa 1964. Bob's view was that the locomotive was unique while the tractor was not, as many had been manufactured. The original locomotive engine was the slightly less powerful 'Major' but as the dimensions are identical I used what I had been given. After four years in operation the locomotive gradually began losing power accompanied by an increasing smell of unburnt diesel fuel. When the head was removed it was found that the exhaust valves on number 1 and 4 cylinders had cracked around their edges with resulting damage to the piston heads.

Through some friends from the Cowra region of NSW, I was advised to contact Bob Reynolds who was experienced with engine rebuilds. On doing so, it became apparent that Bob could not only do the job, but in the 1960s had worked on underground locomotives in the Lithgow Valley Colliery. He probed me about whether I had read the article written by John Browning in LR 231 about the underground diesels which covered his work. I re-read the article and also found in the same issue (page 20) a photograph of the subject locomotive. This was a somewhat remarkable coincidence coupled with the fact that John was the Industrial Railway News editor at the time. After I had the 'head' surface ground locally in July this year, I worked alongside Bob for four days on the rebuild. Fortunately parts can be still obtained for the Fordson engine and Bob had some spare pistons and other parts that proved invaluable. Although now a senior citizen, Bob has lost none of his skills and abilities and was undoubtedly the right man for the job. Over lunch, kindly prepared by his wife Gwen, he retold of his fond memories of the days at Lithgow working on the Hunslet and North British locomotives. Although not required to work underground he mentioned the need to test the locomotives, and venturing below the surface when no one was around, late into his afternoon shift.

The Tulloch is now running again and I have no doubt the engine work is to the same standard that Bob achieved with the Lithgow Valley diesels 50 years previously. I commend not only Bob Johnson and Bob Reynolds, but also John Browning, who I have yet to meet, for his research work that has been invaluable in keeping a heritage locomotive operational.

Gary Barker
Spring Range, NSW

The photo shows the 610 mm gauge Tulloch locomotive Number 003 of 1959 'on shed' on the Glencoe Agricultural Tramway in front of a new bogie wagon, Feb 2014. The locomotive and wagon had just been fitted with a 'fail safe' air brake system using truck standard air brake parts reducing costs significantly. This was decided and designed by the owner, and was not a regulatory requirement. The locomotive is in regular use and is not a display item as can be observed by the red paintwork. Photo: Garry Barker



Book Reviews

THE McIVOR TIMBER & FIREWOOD COMPANY
TOOBORAC, VICTORIA

by Frank Stamford

104 pages A4 portrait format, soft cover, with 100 photos (some in colour) and 21 maps and diagrams. Published by LRRSA.

Produced to the high standard expected of LRRSA publications, this book is more than just a history of the McIvor Timber & Firewood Company Proprietary Limited's firewood-getting railway, which ran north from McIvor Siding, near Tooborac, on the Victorian Railways' Melbourne to Bendigo line. Opened in 1906, its mainline and several branches (not all contemporaneous) reached north through the Warrowitue and Moormbool forests as far as Cherrington, with lines east to Todd's Paddock, Puckapunyal and Mitchell's Creek, with numerous shorter branches and sidings.

The Company was promoted by some of Australia's leading industrialists, involved in mining and railway contracting, together with the West Australian Goldfields Firewood Supply Ltd and a local land owner, to provide firewood for Bendigo's mines, at that time experiencing a shortage locally.

The involvement of William Hedges, the biggest shareholder and WAGFS Ltd's co-founder and General Manager, brought a wealth of experience and led to the appointment of William Prince, WAGFS Ltd's engineer, as the company's manager. Although lightly and roughly laid, it is clear that the operation of the railway was well managed. Although traffic had diminished by 1912, following a decline in Bendigo's mining, and voluntary closure followed in 1926 as firewood sources were worked out, the company repaid its investors well. It was also beneficial to the local community, whose agitation for the line to be re-opened by VR failed.

The use of 5'3" gauge for such a light line was unusual, but probably chosen as two light and flexible Baldwin 2-6-0 locomotives of that gauge were available from Arthur Robb, contractor for the Victoria Dock, West Melbourne. They carried builder's numbers 10067 and 10075 of 1889 and had seen only 3 or 4 years service when purchased by the Company in 1905. They lasted until 1923 when the Company hired, then purchased from the VR its 4-6-0 locomotive W 227. Also built by Baldwin, it carried builder's number 6633 of 1882. On closure of the line it was re-sold to VR and promptly scrapped.

The book commences with a background chapter describing the geographical and social setting of the line and reasons for its construction. It then covers in great detail the construction, locomotives and rolling stock, operation and closure of the line, together with financial details. There are over 50 historical photos, many provided for copying by William Prince's daughter, Mavis, over 40 years ago. However, about a quarter of the book is devoted to a detailed and fascinating description of the route and surviving remains of the line as discovered by enthusiasts during site surveys made from 1972 to 1986. It is accompanied by numerous photos and detailed maps which show the location of each view. This major feature of the book owes everything to the work of these enthusiasts, for much of the line now lies within land used by the Army, with restricted access. Time and bulldozing over the past 40 years will also have added to the further obliteration of traces of the line. Short lived spurs left little or no trace, so the full extent of the railway's operations will now never be known.

As a precursor to the story of the McIvor Company's railway, new information is provided on a 3'0" gauge timber line that ran east from Todd's Paddock to Mitchelltown on the Goulburn River, about 9 km due west of Tabilk. This was operated from 1907 to 1909 by Penrose & Oddy's amusingly named P and O Steam Navigation & Sawmilling Co (it had a sawmill served by river boats) using a 0-4-2ST loco, J Fowler 5851 of 1889. It came second-hand from the Darnum-Ellinbank timber tramway and, with closure of the line in 1909, left behind a traction engine for Nagambie railway station, seeing further use on the Warburton Steam Tramway followed by use at Walsh Island Dockyard in NSW.

In addition to the maps accompanying the site investigations, there is an excellent map of the entire line, prepared by Mike McCarthy, and reproductions of a number of old maps sourced from the Forest Commission and legal agreements between the Company and the Shire of McIvor. There are four appendices, including one detailing the disposal of the Company's assets, references and a full index. The book is a must for both railway enthusiasts and those who are interested in the social and economic history of rural communities and industries now long vanished. It is fascinating, factual and very readable.

Richard Horne

The Chert Bubble – 1920s chert ventures at Mount Victoria.
Volume 1, The company

by Keith Painter

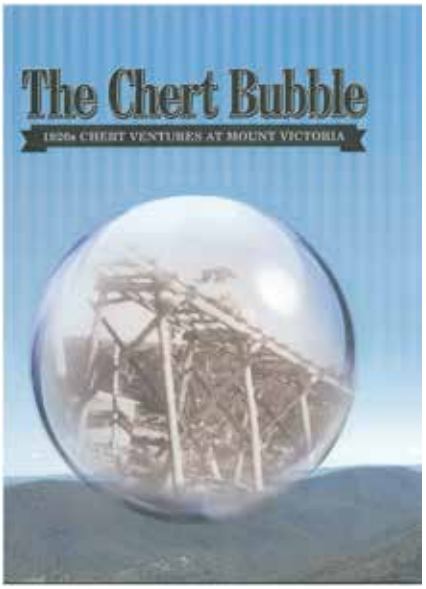
148 pages, A4 portrait , card covers, 48 maps and diagrams, 230 colour and black and white photographs. Published 2014 by Mountain Mist Books, http://mountainmistbooks.com

Keith Painter is well known in NSW for his 'Pocket Pal' bushwalking guides, and has now written a history of the Chert Road Metal and Timber Company's short-lived operation at Mt Victoria in the Blue Mountains, west of Sydney.

Chert is a hard, quartz like stone that was favoured for toolmaking by the regions Aboriginal people, and in the early 20th century as a road surfacing stone, as well as a grinding medium for porcelain and paints and plaster.

By the author's own admission the book has been written as a local history rather than a technical treatise on the operation of the quarry and tramway. This shows in photographs of trestle bridges in other parts of the country to explain the principles of their construction – perfectly acceptable given the target audience.

Keith made 53 visits to the site, from which he has produced maps and diagrams of the spectacular inclined haulage with its five large trestle bridges, the chert quarry and sawmilling operation located in the head of the Kanimbla valley.



The text is accompanied by numerous "newspaper clippings" sourced from *TROVE* on many pages, which I personally found a little distracting, but provide additional contemporary insights into the operation and life in the Blue Mountains in the 1920s.

I would recommend this book to anyone who would like to gain an insight to this short lived operation, and interested in learning more of the history of the Mt Victoria area of the Blue Mountains.

Scott Gould

Railways of Tasmania's Wild West

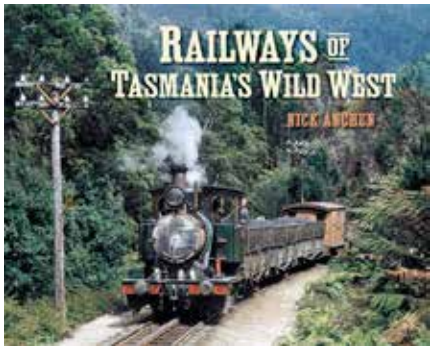
by Nick Anchen

112 pages. 218mm x 275mm. Printed on matt art paper. 160 pages, with 38 black and white and 145 colour photos. Hardbound. Published 2014 by Sierra Publications, Melbourne.

The rugged and remote west coast of Tasmania featured a fascinating array of railways serving the mining industry on a variety of gauges. The Emu Bay, Tullah and Mt Lyell lines still operated with steam in the 1950s and early 1960s, attracting visits from intrepid enthusiasts like

Peter Ralph, Ray Bruce, Keith Atkinson and Bernie Kelly. These men were keen photographers and some captured images not just of the trains but of the essence of the west coast with its forest and mountain scenery and its hardy towns.

A selection of the resulting colour photographs has been assembled for this book, superbly reproduced and using its landscape format to best advantage. Many hours of enjoyment are to be gained from studying them; my favourites were the one of an ASG shunting on the shoreline at Burnie with the port's rather bleak 1956 townscape in the background, and an atmospheric shot of the manager's railcar on the Mt Lyell rack section in 1957.



To a selection of historic black and white images and his own sections of historic background and locomotive details, the author has added the fascinating reminiscences of men who worked on the Emu Bay and Mount Lyell lines. These accounts are a real strength of the book. A final section features photographs of the revived tourist railways of the region and of the remains of those lines that did not survive. All in all, this is an excellent recipe for a most interesting book, and one that is beautifully presented.

There are a few inevitable minor blemishes. We are encouraged to believe that Peter Ralph was inspired to visit the west coast by reading Geoffrey Blainey's magisterial book 'The Peaks of Lyell' before it had been published, no trace of 'penghana' is to be found in the Welsh dictionary, and a locomotive bearing a Tulloch plate is not likely to have been built by Nicola Romeo. I would have liked to have seen photos of the 3ft gauge line at Mount Bischff and of the local tramways around Zeehan included for the sake of completeness.

But these are minor issues. This book is an absolute pleasure to behold and to read, and is sure to be very popular among LR readers. Highly recommended.

Recommended retail price $55 – available from the publisher and the LRRSA online store.

John Browning

Salute to the Hudswells

by Ian Stocks, David Mewes & John Browning

145 pages, 21cm x 27.5cm, soft cover, with 177 photos (137 in colour), 8 maps and 6 locomotive drawings. Published by the Australian Narrow Gauge Railway Museum Society.

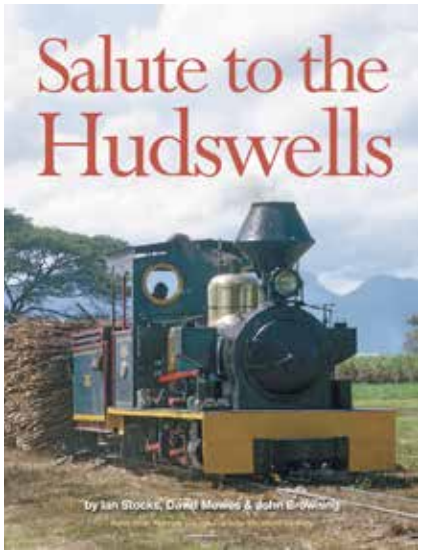
Thirty years ago the authors collaborated on a book 'Last Of The Hudswells', covering the last ten years of operation of Hudswell Clarke steam locomotives at the Colonial Sugar Refining Co Ltd's Victoria and Macknade sugar mills in Queensland.

To coincide with the centenary and return to use of Victoria Mill's Hudswell Clarke locomotive *HOMEBUSH* in 2014, the authors decided to write a new book giving a complete history of all the Hudswell Clarke locomotives used by CSR in Queensland and Fiji. With printing technology now allowing the economical use of colour, nearly 140 of the 177 illustrations are in colour, all reproduced to a high standard, which ensures that the authors' hopes that the book '*inspires happy memories among those who were privileged to see them [the locomotives] at work, and serves as an inspiration to those who in whose hands the survivors are entrusted. For those who live far away, or are too young to have seen them hauling cane, we hope this book succeeds in conjuring up just a little of the magic of a past era*' is surely met, for it is splendidly produced.

The book commences with a general history of the CSR. Formed in Sydney in 1855 to refine imported sugar, it established sugar cane plantations in Queensland in 1881 and Fiji in 1882. Small 2ft gauge steam locomotives by Decauville and John Fowler were introduced in 1885. The development of CSR's railway systems, locomotives, operation and cane crushing process is covered, with individual maps showing the networks at the ten mills (six in Queensland and four in Fiji). John Fowler became the main supplier of locomotives, providing larger 0-6-0T and 0-6-2 designs until, having blotted its copybook in 1911, Hudswell Clarke became the preferred supplier. The design of cane wagons is covered, from rudimentary trucks carrying hand-cut cane to bins of chopped cane with roller-bearing axle boxes, allowing train weights of 500 or more tons.

Hudswell Clarke & Co Ltd was formed in 1860 in the Hunslet area of Leeds. Locomotive building commenced in the following year and the last steam locomotive was completed in 1961, with all production ceasing in 1972. Following a brief history of the company, the book describes each of the locomotive types it delivered to CSR from 1911 to 1953. There were a total of 38 steam locomotives: two 0-6-0Ts, a single 0-4-0ST, a single 4-4-0 and 34 0-6-0 tender locomotives. The development of the last named, with a gradual increase in cylinder diameter from 9½in to 10in (with an 8½in version for light lines and all with 12in stroke), firebox design change from round-top to Belpaire, tender design and many detail refinements are all traced and explained. The 0-4-0ST was used for shunting at Lautoka Mill and the 4-4-0 was used on the free passenger train that CSR was obliged to run over the 111 miles between Rarawai and Kavanagasau. Also described are the single petrol and two diesel locomotives, all 0-6-0, supplied by Hudswell Clarke to the CSR, the first to Queensland in 1928, the later two to Fiji in 1938 and 1950.

This is followed by chapters devoted to detailed histories of each mill (together with map) and full life histories of each of its locomotives (including cost, date ex works, shipping details, areas of work and ultimate fate). Split into two sections, covering first Fiji (Lautoka, Rarawai, Labasa, Penang) and then Queensland (Homebush, Childers, Hambledon, Goondi, Macknade and Victoria) this is the greater part of the book and is, while engrossing, very readable and represents a major piece of research.



The last ten years of steam operation on the Victoria and Macknade linked systems is given a chapter of its own, with all aspects of development, operation, permanent way, rolling stock, locomotives , traffic planning and the coming of computerisation covered. Author Ian Stocks introduced this last for transport planning when he worked at Victoria Mill from 1971. This is followed by the swansong of the Hudswell Clarke steam locomotives, final withdrawal being at the end of the 1976 season, although the exact date is not recorded. It is supplemented with personal reminiscences, which very much bring steam operations to life. Following this is a detailed description of the 17 locomotives that have survived into preservation in Fiji, Australia the UK and the USA. In the last three countries examples are still steamed. As one of the reasons for the creation of the book, the celebratory centenary run of Victoria Mill's locomotive *HOMEBUSH* on 23 June 2014, hauling the first train of the cane season, is fully covered. The idea was that of Ian Stocks, but the realisation was due to the help and cooperation of Wilmar Ltd, successor to the CSR. The book is completed with tabulations of the CSR's Hudswell Clarke steam locomotives, the three petrol and diesel locomotives and the 11 Hudswell Clarke steam locomotives supplied to non-CSR sugar mills in Queensland, an index and words of the song 'Cane Train' by Bill Scott.

This is a book not only for railway enthusiasts, but also for those interested in the history of the sugar industry, or those who simply wish to enjoy reliving an era, not long past, through the many photographs, particularly those in colour.

Richard Horne

RESEARCH

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Manning River breakwater visited

Long before Ian McNeil's excellent two-part article, *The Manning River breakwater railway*, appeared in LR 219-220, I'd noticed the paucity of information available regarding the firm of Granter and Company, the original contractor at Manning Heads. Although I'd managed to accumulate some information about the firm's activities the old fashioned way, by slogging my way through newspapers, the recent additions to *Trove* of the *Evening News* and the *Maitland Daily Mercury* provided the necessary breakthroughs. As a result I'm now able to present a picture that adds considerably to our knowledge of Granter & Co's brief but highly significant activities in 1895 at Crowdy Head, Harrington and in between.

As detailed by Ian, in January 1895 Granter & Co was awarded the first contract for the construction of a stone training wall on the northern side of the entrance to the Manning River. The firm's main player appears to have been James Granter, licensed surveyor and civil engineer.[1] Granter arrived at Harrington on the steamer, *Coraki* on 10 February 1895 to commence the contract.[2] As if to highlight the urgency of the work, the *Coraki* '*grounded on the shallow just inside the river, and after remaining in that position for 24 hours she was successfully floated off.*'[3] The Manning bar work was anticipated to be a great boon to the district, thus large numbers of men camped nearby in the hope of securing employment. About sixty hands were expected to be employed and many of the hopefuls were signed up.

Granter & Co's first priorities were the erection of a wharf for landing its plant, and the construction of a tramline from the site of the training wall to the newly opening quarry at Crowdy Head.[4] By late February, the '*necessary plant, including powerful pile-driving power*,' had arrived.[5] As of 9 March, all the sleepers for the tramline had been cut and stacked along the line of the route and about one mile of it had been cleared and prepared. The rails and some 22 trucks were to be obtained from the Tweed River where they had been used on a contract on the Lismore and Tweed Railway. The schooner, *Sir Henry* which had been engaged to convey the rails to Harrington was anticipated to make three trips to do so.[6]

Construction of the tramline had clearly commenced swiftly, but as a result of heavy seas in mid-April, sections of the track were washed away at Harrington where the harbour was completely exposed to the sea's full fury.[7] Despite, or because of that setback, by mid-May Granter & Co. had nearly completed the tramway. Wind and weather permitting, the firm intended the first load of stone for the breakwater to be tipped on 24 May 1895, in conjunction with the arrival of an excursion from Taree that was to be conducted by the tug, *John Gollan* to raise funds for the Manning River District Hospital.[8] Although the excursion went ahead as planned, there was no activity at the breakwater site. The associated press report was conspicuously silent on construction progress at the site.[9]

By early June, Granter & Co. had '*..completed a tramline four miles and a half long, three shunt lines, and a timber viaduct 300ft in length. The training wall will be commenced at the end of the viaduct,*'[10] The firm had also erected two large cranes at its quarry at Crowdy Head.[11] The first stone for the training wall was tipped on 15 June under the watchful eye of the Government's supervising engineer, Mr E W Kemp,[12] and by the end of the month some 512 tons of stone had been deposited.[13] Kemp was shortly after replaced by Mr Bale of Newcastle.[14] The first tipping was evidently carried out using the firm's locomotive, its arrival on the schooner, Sir Henry, from Sydney was recorded on 10 June,[15] the engine noted as being '*on the line*' in the Sydney press nine days later.[16]

Ian's article identified 0-4-0ST *Burwood* (Rodgers, 1878) and 0-4-0ST *G.B. No. 7*, later to become known as *Tarry* (Parkinson and Monaghan, 1870) as the first two locomotives on the tramway. With *Burwood* still owned by the Merewether family in August 1895 and still at Newcastle the following month, the engine that Granter & Co. placed on the line by mid-June that year could only have been *Tarry*.

As Ian McNeil indicated, the harbour works at Harrington abruptly halted in July 1895. On 10 August it was announced that Granter & Co. had relinquished the training wall contract.[17] It was promptly taken over by railway contractor, George Wilcox, who had already arrived at the Manning and previously, as part of the partnership of Wilcox and Firth, had undertaken construction of the 21 mile section of the Tweed and Lismore Railway from Murwillumbah to Millimbimbi (now Mullumbimby).[18] In late October 1895, *Tarry* was running four trips daily to the breakwater and it was '*..expected that the contractor's new locomotive will be running by the end of the week.*'[19] i.e. *Burwood*.

1. *Sands Directory of SYDNEY*, 1894 – Alphabetical listing
2. *Australian Town & Country Journal*, 16 February 1895, p18
3. *Maitland Daily Mercury*, 22 February 1895, p2 (District News – Taree)
4. *Evening News*, 15 February 1895, p3 (Country News)
5. *The Sydney Mail*, 2 March 1895, p458 (Late Country News)
6. Ibid, 16 March 1895, p566 (Manning River)
7. *Sydney Morning Herald*, 15 April 1895, p5
8. *The Sydney Mail*, 25 May 1895, p1085 (Manning River)
9. Ibid, 8 June 1895, p1190 (Manning River)
10. *Evening News*, 19 June 1895, p3 (Country Notes)
11. Ibid.
12. Ibid.
13. NSW Public Works Department, Annual Report to 30 June 1895
14. *Evening News*, 19 June 1895, p3 (Country Notes)
15. *Maitland Daily Mercury*, 11 June 1895, p2 (Taree)
16. *Evening News*, 19 June 1895, p3 (Country Notes)
17. *The Sydney Mail*, 17 August 1895, p356 (Manning River)
18. *Brisbane Courier*, 19 November 1894, p4
19. *Maitland Daily Mercury*, 29 October 1895, p8 (Manning River)

Ron Madden

Schöma tunnel locomotives

This author is still working on a future *Light Railways* article about Schöma tunnel locomotives that have come to work in this part of the world, principally Australia, but also to near neighbors New Zealand, the Pacific Islands, New Guinea and Indonesia. These projects are all from the mid-1990s onwards, most in first decade of the 2000s.

A quick checklist of known Australian projects with Schöma locomotives include:

- Airport Link Construction, Sydney NSW
- Perth MetroRail City #2 Project, WA
- Melbourne Metropolitan Sewerage Relief Tunnel Project, Vic
- MMSR Project, South Melbourne replacement sewer, Vic
- City East 132kV Cable Tunnel, Sydney NSW
- Gladstone Narrows Gas Pipeline Tunnel, Qld

More widely, the following projects have been identified so far:

- Papua New Guinea. Ok Tedi Gold and Copper Mine, Mine Drainage Tunnel Alliance
- New Zealand. Manapouri II Hydroelectric Scheme, Second Tailrace Tunnel
- New Zealand. Oraki Sewer Replacment, Hobson's Bay Tunnel
- New Zealand. North Shore City Council (Auckland region), Rosedale Ocean Outfall
- Indonesia. Singkarak Hydro Electric Power Project, Pariaman, Padang

I am looking for any photos, notes and anything else on the brief and fleeting visits of these locomotives to their many and various projects, also any publicity documents by either contractors or commissioning customers. Can anybody help along these lines? The most helpful sources are often those people who have worked on these projects. If anyone knows of people involved on these projects who would be willing to be contacted, please let me know via the Research Editor.

Philip Graham

Customs Records

Since 1805, import duties have been charged on goods coming into the colonies, and post federation, the country. The potential of customs records as a means of finding evidence of railway equipment coming to Australia is well worth considering. There do seem to be records held, primarily by the National Archives of Australia, but before I look further into this,

I would be grateful to hear from researchers who have used customs records, successfully or otherwise, as a means of tracking equipment entering the country.
Shipping records published in many newspapers, are easily searched via *Trove*, however they are not complete records of shipping, only a general guide to what was on the vessel. Customs records are likely to be accurate and thorough as import duties were an important revenue stream for government.
Stuart Thyer

Shipyard Stories - Cockatoo Island (NSW)
The 'Shipyard Stories' exhibition presents the story of Cockatoo Island's dockyard and shipbuilding history, a tribute to the hard-working men and women who made Cockatoo Island a powerhouse of industry for over a century. Photos of dockyard life document tales of mateship from former workers and reveal untold stories of this unique island community.
As part of the exhibition's preparation, the Harbour Trust invited former dockyard workers to contribute their photos, memorabilia and stories about working on the island. Much of this material was donated at two 'scan-a-thon' sessions on Cockatoo Island in January. Dozens of former-workers also assisted the exhibition's curators in telling the stories of what was once Australia's most significant shipbuilding dockyard.
The exhibition's rarely seen images portray the rich diversity of the Cockatoo Island dockyard's working life. Some photos capture the drama and spectacle of those major ship launches when the public flocked to the island. Other images document the tough, demanding work of shipbuilding and ship repair.
'Shipyard Stories' also celebrates the mateship and camaraderie of this island community. The dockyard was rooted in tradition and pride of workmanship and it inspired great loyalty. Cockatoo Island is still fondly remembered as 'one of the best places to work'.
http://www.cockatooisland.gov.au/ Accessed 01 Oct 2014
Where: Biloela House, Upper Island, Cockatoo Island
When: Open 1 September - 31 December 2014, 9:30am - 3:30pm
Cost: Free entry
As Cockatoo Island utilised light railway operations on site, including a narrow gauge electric tramway, horse drawn tramways for delivering materials around the site and massive track based travelling cranes, the exhibition may well include images of these in operation.
For those who are interested in the broader engineering of the site, visit the Restoration Workshop located in buildings 141, 145 & 147 and watch volunteers bring the island's machinery back to life. Workshop open every Mon, Tues & Wed.

Massive rail based cranes were capable of being moved around the Sutherland (pictured) and Fitzroy graving docks via a network of tracks.

This mobile crane was manufactured by Davis and Primrose, Edinburgh, Scotland in 1912 and was capable of propelling itself around its workplace at Sutherland Dock. Photos: Terry Elliot

Amusement Railways of NSW
Well known author Jim Longworth is preparing a manuscript for publication as a book on amusement railways in NSW. Anyone with images or information they would be willing to have included is urged to contact Jim via the Research Editor.

Vaughan Springs miniature railway (Vic)
Re-launched on 7 September 2014 (Father's Day), the Vaughan Springs miniature railway has been put back into service with support from the local community. Ranger Noel Muller says "*The small train has been restored by Wally Williams and others and it will be running at the Open Day. It's wonderful to see the Friends Group volunteering in the park and making these recreational opportunities available for visitors.*"[1]
The locomotive is a steam-outline, possibly petrol engined unit, running around a simple circular track of around 20m diameter with a gauge of 12-15in. A 'tunnel' on the line also serves as the train storage shed. The railway was built in the 1950s or 1960s and was reported as still running in the mid 1990s but ceased operation some time before 2000.[2]
Stuart Thyer
1. http://parkweb.vic.gov.au/about-us/news/vaughan-springs-open-day Accessed 15 Oct 2014
2. http://www.railpage.com.au/f-p1077600.htm (Accessed 15 Oct 2014)

Heritage & Tourist NEWS

News items should be sent to heritagetourist@lrrsa.org.au Digital photographs for possible inclusion should be sent direct to Scott Gould at editor@lrrsa.org.au including the name of the location, the name of the photographer and the date of the photograph.

QUEENSLAND

Friends of Archer Park Station and Steam Tram Museum Inc., Rockhampton

1067mm gauge

The Purrey Steam Tram (Valentin Purrey, Bordeaux, France) was due to be closed down, stripped and cleaned ready for inspection by the contractor and repairs carried out as necessary by the Dooley Street workshop staff. It is hoped that the servicing of this unit will be completed by Christmas.

Some enthusiasts are looking to improve the appearance of the station and particularly the platform by re-establishing gardens and potted plants and trimming hedges.

Tram Tracks 10/14

AUSTRALIAN SUGAR CANE RAILWAY, Bundaberg

After two years out of service, and surviving the 2013 floods, Bundaberg Fowler 0-4-2 (3 of 1952) has been steamed for testing. It is hoped to have the locomotive in service before the end of the year.

Ross Driver via John Browning 10/14

NAMBOUR AND DISTRICT HISTORICAL MUSEUM, Nambour

610mm gauge

Following three years of conservation, the historic Shay (Lima Locomotive Works, composite locomotive from 2091 of 1908 and 2800 of 1914) was due to be unveiled on Saturday 29 November 2014 at the Nambour Museum.

Clive Plater 10/14

DURUNDUR RAILWAY, Woodford

610mm gauge

President Terry Olsson reports that the Railway recently installed the 100th steel or concrete sleeper in the existing mainline. Replacing timber sleepers with steel or concrete as they come up for renewal not only improves the standard of the track, but over time will see a reduction in the amount of labour required for maintenance – something very important in a volunteer organisation. It is for the same reason, they are constructing the track extension using all steel or concrete sleepers.

On the rolling stock front, work has continued to a high standard in the overhaul of the steam loco *Melbourne* (Hudswell Clarke 1701 of 1938). The bronze main driving wheel bearings have all been replaced with new.

Many rotten timber sleepers have been marked for eventual replacement by steel or concrete. Eventually it is hoped to replace all timber sleepers.

On 11 October 2014 the Kilcoy-Woodford Anglican Church hired the train and used the site for a Family Fun Day. Partners on the site, the Woodford Area Men's Shed also participated. The day was a success with the train carrying 281 passengers in four hours – a fantastic effort.

On the same day in Ingham, members and authors David Mewes, Ian Stocks and John Browning officially launched ANGRMS' latest book – *Salute to the Hudswells*. This event was sponsored by Wilmar Australia at its Victoria Sugar Mill and coincided with the celebrations to mark the centenary of its Hudswell Clarke *Homebush*.

Durundur Railway Bulletin, 9/10 and 11/12 14

On 6 November 2014 the Society took delivery of Perry Engineering 0-6-2 B/N 5643/51/1, and box wagon No. 502 from the Dreamworld theme park. Constructed for the Bingera sugar mill near Bundaberg, the loco was withdrawn in 1974,

Perry Engineering 0-6-2T B/N 5643/51/1 of 1951, is lowered onto a truck outside Dreamworld's Central Park station in preparation for its journey to Woodford. Photo: Terry Olsson

and sold to the Goulburn Museum of Historic Engines. In 1977 the loco went to Panania, NSW to a private owner, before purchase and restoration by Dreamworld in 1982.

It is a great credit to all involved in ANGRMS that Dreamworld chose to donate this locomotive and wagon to ANGRMS.

In particular Bob and Mark Gough are to be thanked for initiating the discussions with Dreamworld staff. I would also like to commend Mark Gough for the excellent job he did arranging and managing the move – well done Mark.

The loco needs some work and a detailed assessment is still to be undertaken. At this stage the tentative plan is to have it operational about April/May next year (as well as the physical work there is also a lot work to gain accreditation for the loco, and conduct driver training). Once *Melbourne* is operational again it will drop back to standby loco. When *Bundy* and *Melbourne* are both back in operation, the loco can then commence a full overhaul.

This additional operational steam loco will allow the Society to much better manage its operational steam loco assets.

Terry Olsson via John Browning

It is the very earliest days of the railway at what was then known as the Currumbin Bird Sanctuary (now the Currumbin Wildlife Sanctuary) photographed on 21 August 1964. Much has changed about both the railway and the Sanctuary in the intervening 50 years. Photo: Harold Sewell

CURRUMBIN WILDLIFE SANCTUARY RAILWAY, Currumbin

290mm gauge

The Currumbin Wildlife Sanctuary is celebrating 50 years of involvement with trains. Alex Griffiths, the founder of the Currumbin Wildlife Sanctuary, requested the construction of a steam locomotive in 1964 so people could ride behind it around on a loop on the original site of the sanctuary.

The track now is 2.5km long and travels along a winding path through the trees and bush of the Sanctuary Wildlife Reserve. The track gauge is 11.4 inches (290mm) and constructed of BHP steel 14lb rail. The track, now laid on in-house constructed concrete sleepers, was extended in 1974 under the Gold Coast Highway to transport guests through his Currumbin property. Alex's property, now known as Currumbin Wildlife Sanctuary, still operates the steam locomotive and in October 2011 the original locomotive was fully restored to celebrate Alex's 100th birthday. Today, this coal fired steam locomotive and its train continues to travel through the Sanctuary.

The locomotive was a compromise design based on an American Baldwin AC16 and Australian locomotive CC17 and was made by Brisbane Engineer James Jackson. The wheel arrangement is of the Mikado design, (2-8-2). The driving wheels are spoked cast iron fitted with cast steel tyres, the diameter being 290mm. The cylinders are 100mm in diameter with piston valves operated by Baker valve gear. The tender has two bogies with each set having four wheels; the tender houses the driver's seat and coal and water storages. The steam locomotive is 4.5m long, 1m high and 0.6m wide. It is coal fired and operates on a boiler pressure of 125/150psi. The boiler is a wet leg design which means it has water circulating around the firebox walls. The steam locomotive develops 2.42 Australian standard horsepower and its gross weight is two tonnes.

While the locomotive has changed its appearance little after 50 years of operation, the 2011 overhaul saw a new boiler manufactured, braking systems upgraded and the locomotive fully overhauled. It now shares the task of hauling the park's 400,000 annual visitors with three other locomotives. Photo: Currumbin Wildlife Sanctuary

The locomotive hauls eight carriages that can carry 66 adult guests. A round trip takes approximately 20 minutes including all station stops. Joining the railway in 1974 was the Red Train. This was the first diesel locomotive in the collection and is replica of the Commonwealth Railways locomotive known as GM1 which operated out of Sydney. The Blue Train was built in 1986 and is a replica of a Queensland coal and shunting locomotive known as DH44. To complete the current collection, the Green Train, a diesel powered steam outline locomotive, was built in 1994 as a replica of steam locomotive No. 24 from America's Sandy River Railway. All diesel locomotives are powered by four cylinder SD 2.2 Litre Nissan diesel engines. Coupled to each motor is a hydraulic pump which produces 2,000psi of oil pressure to two orbital hydraulic motors mounted in both four wheel bogies.

With daily timetabled operations, all four trains continue to operate at different times throughout the year.

Dave Noble, Currumbin Wildlife Sanctuary, 10/14

Barron Falls Hydro Electricity Station, Kuranda, QLD

610mm gauge

A static display has been installed at the Barron Falls power station on the Skyrail Rainforest Cableway near Kuranda, Queensland. The display preserves some of the original Barron Falls Hydro Electricity Station haulage equipment, and comprises a haulage trolley, a personnel trolley, and a flying fox cage. The haulage trolley is wooden-framed and has a single wheel-set at each end. It is carrying two sections of octagonal steel pipe approximately 300mm in diameter. The personnel trolley is also wooden-framed, with three bench seats, and has a single wheel-set at each end. It appears to be designed for an incline of around 45 degrees. The flying fox cage has a metal frame and roof, wooden floor, chicken wire sides, and could hold several people.

Interpretive material at the site indicates that the original Barron Falls power station was opened in November 1935. It was the first underground power station in Australia and the first hydro-electric plant in Queensland, and supplied Cairns with electricity for 28 years. Equipment for its construction was brought to the Falls over the Cairns-Kuranda railway, and then transported eastwards across the top of the falls to a point above the power station site. An inclined tramway built to a gauge of 2ft was used to transport personnel and materials to the foot of the gorge and the power station site. Loads were secured to the trolley and lowered by a diesel-powered air-operated winch. At the foot of the incline, a gantry was used to transfer

The personnel wagon used on the inclined tramway at Barron Falls. *Photo: Simon Moorhead*

The haulage wagon (complete with sections of iron pipe) that was used in the construction of the Barron Falls power station. *Photo: Simon Moorhead*

the load to a short section of tramway, which was hand-operated as far as a tunnel, where another winch was used to haul the equipment into the power station site. For personnel transport of up to six people, a bell system signalled the winch driver to start the ascent. It was often the case that the long journey up the hill proved too much for the capacity of the air compressor, and a stop would have to be made to build the pressure up again.

The flying fox was used to replace earlier bridges across the top of the falls that had been washed away in floods. The original carriage was a simple wooden platform suspended from a chain-block. Low sides were later added to improve its load-carrying capacity. Safety for passengers was further enhanced with the addition of a waist-high chain-mesh fence, before a larger, roofed and fully-enclosed cage was built (which is the one on display today).

The original Barron Falls power station was replaced by another, more modern station, lower down the river in 1963. The display is an interesting and well-interpreted collection of light railway equipment, and it would be interesting to know what remains of the route of the various construction tramways today.

Simon Moorhead 09/2014

NEW SOUTH WALES

ZIG ZAG RAILWAY, Lithgow

1067mm gauge

ZZR has been offered legal advice on how to proceed with the claim against the Australian Defence Force and Comcover for bushfire damage. This offer came through the office of the Chair of Transport Heritage NSW Peter Lowry. He has taken on the cause of helping ZZR to get back to operating along with colleague and fellow lawyer, John Mulally.

The Southern Downs Railway at Warwick in Queensland has contacted the railway about a "spare" diesel and/or steam locomotive. Ex EBR 1003 (Walkers Ltd. 1963) on lease might be a possibility.

Switchback, Issue 135 8/14

Eskbank Locomotive Depot and Museum

The Eskbank Locomotive Depot & Museum has concluded final arrangements to purchase a Lima 70 Ton 3 truck Shay similar to those that operated on the Wolgan Valley Railway at the turn of the 20th century. The hunt to secure a Shay locomotive began almost 5 years ago and has finally concluded with the acquisition of a Shay located in California. The locomotive, (2366 of 1910) will become the centre piece of an operational display dedicated to the Commonwealth Oil Corporation which built the massive oil shale works at Newnes and the 53km railway that connected it to the worldwide markets. Further details will be released in coming weeks on how people can assist the company to restore what will become Australia's only standard gauge Shay locomotive.

Eskbank Locomotive Depot and Museum web site 11/14

Com-Eng built Ivanhoe *under trial on the ILRMS on 6 November, eight years after being received by the railway. The loco served at CSR's Kalamia Mill from new.* *Photo: Brad Johns*

Illawarra Light Railway Preservation Society, Albion Park

610mm gauge

4wDH Com Eng GA1042 of 1960 *Ivanhoe* went into official service at the ILRMS recently, eight years after its acquisition from Kalamia Mill. Painted in the Kalamia CSR livery of the yellow body and red headstocks head stocks and silver roof it underwent trials 6 November for member training and qualifications. Sunday 9 November saw the annual 'Tongarra Trainfest', featuring steam and & diesel rides along with the official commissioning of *Ivanhoe*, the reopening of the Ken McCarthy Museum Building and the recommissioning of the station bay road.

Brad Johns via John Browning

VICTORIA

WALHALLA GOLDFIELDS RAILWAY, Walhalla

762mm gauge

Work has commenced on construction of a verandah at Walhalla. Steel stanchions will be used to replicate the original wooden posts, and asphalting of the platform and surrounding areas will also take place.

On Sunday 26 October 2014 WGR celebrated 20 years since the refurbishment of the Thomson rail bridge. After lunch at Walhalla in the goods shed guests caught the special train to Thomson. They enjoyed a traditional birthday cake and the release of more than 100 balloons as the train stopped on the Thomson bridge. It was also a reunion of people who currently work on the railway and a day to remember those who started out on the railway project over 20 years ago.

The new compressor installed in former EBR 1001 (Walkers 576 of 1963) has performed so well that the main reservoir pressures have been consistently maintained at the maximum set pressure. Unfortunately some of the ageing control pipes have failed. The local Pirtek agent has been to inspect the locomotive and new hoses and control valves are to be fitted to improve reliability further.

All three operable locomotives have now had their annual service (B exams) ahead of the forthcoming busy period. This is the first time the Railway has carried out the complete service on each loco, including oil and filter change in house rather than having commercial servicing done. A local supplier delivered all the appropriate oils and filters to the Thomson station and the WGR was able to complete the work without the need to pay labour and travel costs. Part of the work entailed replacement of brake blocks on both the 10 class and the Fowler.

The carriages have received their annual brake service. This was made considerably more difficult as a rockslide prevented two carriages from being delivered to the pit at Walhalla where it was intended all be serviced, hence they were serviced with great difficulty from the flat gravel surface under the cars at Thomson.

Work is proceeding on several of the work trolleys donated by Orica to have them fitted with wider wheels in preparation for having them certified. Some of the Orica wheels have been machined to form new hubs to which new, wider tread, Fairmont trolley wheels are being fitted to correctly match the WGR gauge. The new wheels and a new set of brake blocks have been supplied in exchange for the Fairmont 2-stroke engine removed from MTV4. A new Honda 4-stroke engine has been purchased to replace it. Introduction of these trolleys will make works activities considerably easier as they are fitted out to carry tools, materials and set up as specialty vehicles such as for fire support and weed spraying.

Since the theft of a large quantity of tools from the way and works shed at the Thomson yard earlier this year, the WGR has had a kind offer of tools from the Drouin Men's Shed. WGR has an insurance claim ongoing but in the meantime the donated tools have filled the gap.

Dogspikes and Diesel 9 and 10/14

Heritage & Tourist NEWS

PUFFING BILLY RAILWAY, Belgrave

762mm gauge

The railway is enjoying a great start to the financial year with July passengers totalling 25,045, another monthly record and over 26% ahead of last year's record of 19,819. This rate of compound growth is continuing the upward trend of the last two years. It is early days, but the railway could be looking at further passenger growth for the third year in a row.

The matter of future locomotive requirements is under discussion and the June meeting of the ETR Board decided… "That the Board keeps all future options open in relation to either the restoration of locomotive 3A or the construction of an all new NA locomotive. Further that the issue of future locomotive requirements receive detailed examination following completion of locomotive NGG 16 129 and its release to traffic".

At the July meeting of the PBPS Executive Committee, a mirror resolution was approved. Following these discussions management has been examining the issues, which are likely to restrict the Railway's ability to grow. If the growth of the last two years continues at the same rate it will carry 326,000 passengers in the current year and 349,000 in 2016. Given that during the next two years external funding is not guaranteed, the railway needs to be cognisant of the future requirements and innovative in its approach to addressing them.

Online bookings for excursion trains were implemented from Monday 14 July 2014.

At the July Board meeting an interim Capital budget was approved for the railway for 2014/15. This includes the completion of the new boiler for NGG16 -129 (Beyer Peacock 7430 of 1951), the standby generator capable of meeting all Belgrave power demands, a secure workshop and storage facility for the servers and other IT equipment, and a new building for volunteer co-ordination staff and volunteers.

The board also approved a capital expenditure for the extension of the Lakeside toilet block building to provide a sit down area for customers to be served drinks and light meals. This facility is expected to markedly improve the destination and should cover costs in less than three years.

A book detailing the story of the Puffing Billy Preservation Society now has a title – "Saving Puffing Billy". Work is advanced to finalise the first volume, covering 1955 – 1965 (from creation of the Society through to the return of the train to Emerald). Costings have been received for printing and if all goes to plan we should see Volume 1 on sale in 2015.

Next year marks the 50th anniversary of the return of Puffing Billy to Emerald, and in order to celebrate this milestone, an organising group is being established.

60th Anniversary of the first Young Sun Special

On Saturday 13 December 2014, the Puffing Billy Young Volunteers Representatives Team will be celebrating 60 years (and two days) since the first 'Young Sun Special'. These were special trains, sponsored by *The Sun* newspaper, to farewell Puffing Billy in 1954, after the Victorian Railways officially closed the line on 30 April, 1954. These specials provided the catalyst for the creation of the Puffing Billy Preservation Society, and are the reason we still have the railway today.

Monthly News October 2014, number 495, Puffing Billy web page

Tasmania

Queenstown Heritage and Arts Festival, Queenstown.

This year marks the 100th anniversary of the opening of the Lake Margaret hydro electric power scheme built by the Mount Lyell Mining and Railway Company to initially supply electricity to its copper mines and smelter at Queenstown, on the West Coast of Tasmania. The Queenstown Heritage and Arts Festival was organized to celebrate this significant event which was took place from 10-12 October 2014.

Lake Margaret was originally accessed by a seven-mile long 2 ft gauge tramway which was an extension of a pre-existing firewood tram. Krauss locomotives once worked the line that even featured a zig zag section. At the terminus, a 2 ft gauge haulage was built up the hillside beside the steel penstock pipes to access the top of the ridge, then a construction tram ran out to the dam wall itself beside the wood-stave pipe. (See *Light Railways* 223 of February 2012).

Of railway interest at the Festival was an exhibit at the West Coast Wilderness Railway station called 'I think I can'. This was a model railway, built by local modellers Messrs Tregoning and Nolte with a backdrop painted by Queenstown's resident artist Raymond Arnold. The model featured the old Queenstown railway station precincts and '*Using an in-progress 1960s Queenstown railway model as inspiration, you are invited to play by becoming a temporary resident via a tiny puppet, engaging in an optimistic task of collective storytelling that deals with dynamic notions of residency and responsibility.*' This was a very popular, for both young and old, interactive exhibit played out by the Terrapin Puppet Theatre of Hobart. Live video

For the first time in 12 years, all of the serviceable NA fleet were steamed at Belgrave on Wednesday 29 October. Partly as preparation for the busy Christmas period, while 12A was headed to the workshops shortly after the photo was taken. From left to right, 14A, 6A, 7A, 12A and 8A. The frames of the remaining member of the class, 3A, are in the Menzies Creek museum. *Photo: Graeme Daniel*

of the tiny puppet and scene was projected and magnified onto two large screens '*for the patron to see it in action.*'
A local historian, Mark Metrikas, arranged a history display of photographs in the library precinct; included were captioned photographs of the Lake Margaret tramway and its associated railcars in operation.
A frequent all day bus service was run out to Lake Margaret for the convenience of visitors. The last few kilometres of the access road are actually on the old tramway formation. The power station was open for inspection with a historic photograph collection nicely displayed in a noise proof room. Some interesting tramway photos were on show. Tea and coffee was kindly provided in the old hall across the Yolande River beside the one-time employees' disused residences.
The launch of a new book entitled *Born to Rain* by Frank Martin, once a resident of Lake Margaret was well attended in the Queenstown library. There are some interesting stories about the rail motors and residents' reliance upon the tramway as the sole means of access to Lake Margaret prior to 1964. Two diesel locomotives have survived into preservation: *Romeo* is currently at the Wee Georgie Wood Railway at Tullah, Tasmania and the Tulloch locomotive is privately preserved in NSW. (See Page 37 of this issue).
On Friday and Saturday night 'an interactive architecturally-mapped projection that evokes and celebrates the mechanisms of Hydro Power generation' was projected, with an audio background, onto the magnificent façade of the Empire Hotel in Orr Street.
The weekend was very well attended with many old residents of Lake Margaret and Queenstown especially returning for the festivities.
The tramway formation today is very overgrown and it is extremely difficult to trace the route through the scrub. Beside the Lyell Highway near the Strahan turnoff can be found the concrete foundation of the employees' cars garages and the occasional dog spike. The site of the zig zag is in need of a thorough bushfire to reveal the rail formation. A few lengths of rusty rail remain in the bush where the tramway formation becomes the present road for the final few kilometres to the power station.
Ross Mainwaring. 10/14

SOUTH AUSTRALIA

SOUTH AUSTRALIAN LIGHT RAILWAY CENTRE, Milang

1067mm and 610mm gauges
The Port Milang Historic Railway Museum in South Australia has some new drivers and it has been expanding its collection in recent years. While the museum is housed in the old SAR station and there are a number of broad gauge wagons and carriages, remnants of the horse-drawn line that connected the SAR yard to the jetty on Lake Alexandrina are also featured.
A number of items of rolling stock that relate to SA jetty tramways have recently been moved to the museum. The latest is the preserved SA Harbour Board Fordson rail tractor that has been at the National Railway Museum for many years, which has been sent to Port Milang on loan.
The Milang museum's newsletter reports that this year a contractor was hired to spray along the line and between the tracks and he did a good job with a neat result.
The museum's new shed received Council approval and has been completed. It will be home to the SA Light Railway Centre and house the 2 ft gauge Munitions Train from Smithfield that has been in storage for some time, as well as the 3 ft 6 in gauge rail tractor and the jetty wagon on lease from the NRM.
Members are catering for about 15 bus groups, each numbering from 14 to 20 people through the Blue Wattle Tours. The income will help with the on-going upkeep of the carriage and station building.
Bob McKillop and Milang newsletter via Bob Sampson 9 and 10/14

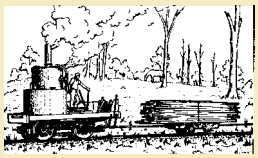
OVERSEAS NEWS

NEW ZEALAND
BUSH TRAMWAY CLUB, Waitakere Ranges Auckland

610mm gauge
The Bush Tramway Club is commencing planning its 50th anniversary celebrations and the centennial of the railway opening to Pukemiro junction in 2015. An update and reprint of the 40th anniversary booklet is being considered plus special open days.
FRONZ 135

WALES
FFESTINIOG AND WELSH HIGHLAND RAILWAYS, Portmadoc

610mm gauge
With K1's (Beyer-Peacock 5292 of 1909) boiler certificate expiring this November, the company has confirmed that it will support the K1 Group's intention to complete the essential work required to overhaul the boiler, which includes fitting new tubes. Before that date the K1 volunteers hoped to finish the steam supply and electrical circuits for the turbo-generator that will power and charge the batteries for the headlights. Other work includes overhauling the rear engine pivot, a connecting rod bush and the problematic blast pipe arrangement. A warm axle box has also been reported. There are some funds available to rebuild one or other of the water tanks/coal bunker, but no decision has been made as yet on which one.
The K1 Group intends to wind down by October 2015 as most of the committee are retiring and have been involved since 1995. They have made an appeal for volunteers for working parties and anyone who wants to help out with the Group and/or take over from the existing committee, but as no one has yet come forward, they are aiming to do as much as possible this winter on this iconic locomotive so that she can be put back into service as soon as possible. Then any Group funds remaining will be transferred to the WHRS for future support of K1 if the Group is wound up. A WHRS locomotive support group could take on the role of supporting the WHRS funded locomotive projects and other WHR locomotive work.
Andy Rutter, *Inside Motion*, 9/14



LRRSA NEWS

MEETINGS

ADELAIDE: "Christmas Film Night"
Trevor Triplow is providing the program, with supper provided by Wendy.
Location: The Reserve, 100 Sir James Hardy Way, Woodcroft
Date: Thursday 4 December at 7:30pm
Space is limited, please contact Les Howard on 08 8278 3082 before 1 December if you are intending to come.
News of light rail matters will be welcome from any member.

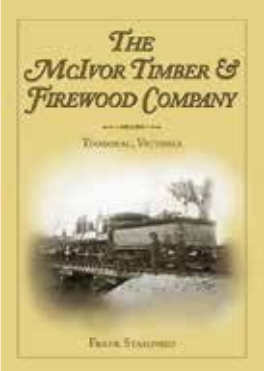
BRISBANE: "Mike Loveday photographic competition"
The annual Mike Loveday slide and photographic competition will be held.
Location: BCC Library, Garden City Shopping Centre, Mount Gravatt. After hours entrance (rear of library) opposite Mega Theatre complex, next to Toys'R'Us.
Date: Friday 19 December at 7:30pm

MELBOURNE: "Lesser-known Narrow Gauge railways of Europe"
An eclectic collection of short movies featuring European narrow gauge will be presented. From German Peat lines (with unbelievably rough track) to Romanian forest railways (with steam), plus some metre-gauge action in the mid-winter (with steam, snow and sunshine) all guaranteed to be very interesting!
Location: Ashburton Uniting Church Hall, Ashburn Grove, Ashburton.
Date: Thursday 11 December at 8:00pm

SYDNEY: "No December meeting"
The next meeting of the NSW group will occur in February 2015. Check the February issue of *Light Railways* for details.

New from LRRSA Sales ...

The McIvor Timber & Firewood Company



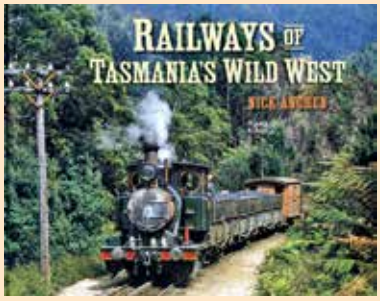
Tooborac, Victoria
By Frank Stamford
Published by the LRRSA
Soft cover, 104 pages, A4 size
104 photographs, 23 maps and diagrams, references, and index.

The history of a 5ft 3in gauge tramway from Tooborac to Mitchell's Creek, Puckapunyal, Moormbool West and Cherrington.

Price $30.00 plus postage
($22.50 to LRRSA members)
Weight: 490 gm

Railways of Tasmania's Wild West

By Nick Anchen
Published by Sierra Publishing
160 pages, 282mm x 225mm landscape, hard cover, over 200 photographs

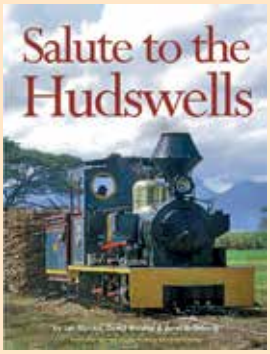


A wonderful collection of photographs, and recollections of railwaymen and travellers in an area which contained some of Australia's most remarkable railways.

Price $59.95 plus postage
($53.95 to LRRSA members)
Weight 1,080 gm

Salute to the Hudswells

By Ian Stocks, David Mewes & John Browning



Published by the Australian Narrow Gauge Railway Museum Society
Soft cover,
144 pages, 210 x 274mm

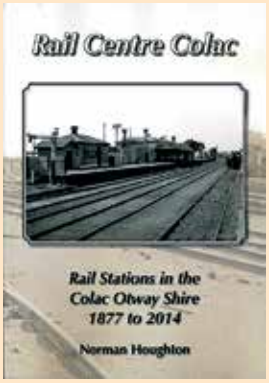
Gives the history of 41 Hudswell Clarke locomotives that worked on 2ft gauge sugar cane lines in Queensland and Fiji.

Profusely illustrated with photographs and scale drawings.

Price $35.00 plus postage
($31.50 to LRRSA members)
Weight: 525 gm

Rail Centre Colac

Rail Stations in the Colac Otway Shire 1877 to 2014



By Norman Houghton
Published by the author.
262 pages, A4 size, soft cover, many historic photographs.

Gives a detailed history of every station and siding from Birregurra to Pirron Yallock, and on the Alvie, Beeac, Forrest, and the Beech Forest narrow gauge line (which takes up 105 pages, plus 21 pages for its junction station - Colac).

Price $63.50 plus postage
($57.15 to LRRSA members)
Weight 770 gm

Postage and packing: Within Australia, up to 250gm $2.10; 251 to 500gm $3.50, 501 gm to 3 kg $13.40, over 3 kg to 5 kg $16.70
Send to: LRRSA Sales, P.O. Box 21, Surrey Hills Vic 3127, Fax (03) 9701 8221.
Payment may be made by cheque, money order, Mastercard or Visa.

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see our web site:
www.lrrsa.org.au

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- Meetings in Adelaide, Brisbane, Melbourne and Sydney
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Application for membership of Light Railway Research Society of Australia Inc. P.O. Box 21, Surrey Hills Vic 3127

I, _____
(full name of applicant)

of _____

_____
(address) (postcode)

desire to become a member of the Light Railway Research Society of Australia Inc. In the event of my admission as a member, I agree to be bound by the rules of the Society for the time being in force. I enclose cheque/money order for $48.00, or please charge my Visa/Mastercard No.

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