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LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways



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Imperial to metric conversions:

1 inch (in)	25.40 millimetres
1 foot (ft)	0.305 metre
1 yard (yd)	0.914 metre
1 chain	20.11 metres
1 mile	1.61 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

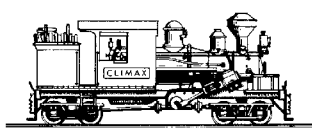
I was half-listening to ABC Melbourne radio recently and the usual bubbly early afternoon presenter was doing all the usual 'light' entertainment and talkback. I wasn't really listening when suddenly I heard the word "Trove".

The mentioned bubbly presenter related a story – recently on a very cold day she had stayed in bed and spent hours on Trove. Hooray, I thought. Trove is not just for oldies! Several interesting (to me) phone calls came in, one from a researcher who related what I had noticed in Trove newspapers but not really thought much about. During the Great War (1914–18) many young men were overseas and would write to their family, at the same time thanking the town for having sent them gifts of woolly socks, fruit cake, Anzac biscuits, tobacco and the like.

Often the family would pass a copy of the letter to the local paper who would duly publish the contents from 'One of Our Boys'. Fast forward a century and in thousands of cases the family has lost Grandad's original letters – but family researchers are now sometimes finding the letters in the local paper on Trove newspapers. How good is that!

Even if you are not an active researcher, you can always help by correcting, online, the papers' text. Some people correct entire pages, some just the births, deaths and marriages etc. When I find something of interest, I tend to just correct the important words – names, places, events etc., ignoring 'minor' words. Why bother correcting 'Tdhę' to 'the'? No-one searches for 'the' (there are already 214,267,671 of them in Trove so why add more!) But to correct 'Bowelltown' to 'Powelltown' – now that is useful. Also useful will be if our new Federal government, which already has a very challenging 'to do' list, improve funding for the National Library's Trove programme – that is something all researchers would surely applaud! .
Phil Rickard

Front Cover: Pioneer Mill's Walkers B-B DH Jerona (611 of 1969) against a background of the sunset and a cane burn on 2 August 2022. Photo: John Kirk



**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.

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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.

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Black Sands from Yamba

Early light-rail based beach mining operations at Yamba and Angourie

by Ian McNeil

Introduction

The black sands found on many New South Wales north coast beaches are incredibly old. Their minerals were formed in igneous and metamorphic rocks hundreds of millions of years ago. Erosion and weathering released these heavy, long-lived mineral grains which were washed down rivers to the sea. Currents and tides deposited them onto beaches where wave and storm action concentrated them and washed away lighter quartz sand particles.

Three species – zircon (zirconium silicate), rutile (titanium dioxide) and ilmenite (iron-titanium oxide) – make up 97% of the heavy mineral fraction. The remaining 3% contains small quantities of gold, platinum, osmiridium (a natural alloy of osmium and iridium), cassiterite (tin oxide), monazite (a rare-earth phosphate containing cerium and radio-active thorium) and garnet. It is the dark-coloured grains of rutile and ilmenite that give black sand its characteristic colour.

Early European settlers noticed that thick layers of heavy back sands – later referred to as ‘sniggers’ by prospectors – were sometimes uncovered when storms and rough seas cut into beaches. But it was not until 1870 that it was realised they contained gold. This sparked something of a minor gold rush and over the next 60 years small parties of miners worked beaches up and down the coast for generally very small returns. The gold was finely divided, usually in very low concentrations, and was difficult to separate out. Mining for gold on beaches was often referred to as “poor man’s diggings.”

Successful commercial exploitation began in the 1930s.



The black sand deposits on the beaches of Yamba and Angourie were among the richest found on the east coast of Australia. TAMCO took out the first beach mining leases there in 1928 and began commercial exploitation in 1935. Using only horse scoops, workmen’s shovels and lightly laid tramways, TAMCO mined some 20,000 tons of titanium-zirconium concentrates over a six-year period, all of which it shipped to America to process at its Niagara Falls works.



Pippi Beach, Yamba looking south to Barri Point with Angourie Point in the distance. TAMCO’s GL1 mining lease and its beach tramway ran for 2km south along the sand to its small treatment plant at the southern end of Barri Beach. The black sand deposits on these beaches were among the richest ever mined by the company. Photo: Rob Knight

Small companies were formed to mine the black sand beaches, but it was not gold they were after this time. It was the titanium and zirconium minerals for which markets were opening in the USA. Rutile and ilmenite were being used in the manufacture of titanium metal and its alloys. Zircon was used to make superior high-temperature refractories.

The early mining and treatment methods were primitive. Black sand was dug up from beach deposits using horse scoops and labourer's shovels. The more affluent companies laid down lightweight tramways to haul mined sand back to small beachside treatment plants. Small shaking tables were installed to gravity-separate the heavy mineral fraction and remove unwanted quartz beach sand. Air-dried concentrates were bagged and shipped to America for further processing and use. The demand for concentrates fluctuated and local companies often had considerable difficulties marketing their products.

The most successful company to mine NSW north coast beaches during the 1930s was the Titanium Alloy Manufacturing Company (TAMCo) which supplied its own plant in Niagara Falls, USA.

The Titanium Alloy Manufacturing Company (TAMCo)¹

TAMCo was an American company founded in 1906 by a French chemist, Dr. Auguste Jacques Rossi.² He had patented processes to produce titanium alloys in an electric furnace and to produce titanium white paint pigment from ilmenite. The company produced titanium metal and alloys from rutile and ilmenite, also a high temperature refractory "Zioxide"

from zircon. The works were located at Niagara Falls to take advantage of hydro-electricity generated by the local power plants.

After WW1, TAMCo was on the lookout for new deposits of rutile, ilmenite, and zircon. In 1928 it sent Dr. David Hale Newland, a New York State geologist, to Australia to investigate black sand deposits on northern NSW beaches.³ Newland spent months in Australia studying the beaches between Coffs Harbour and southern Queensland. This culminated in his application for three beach mining leases for zircon which was TAMCo's chief requirement at the time. The largest lease covered Iluka and Bluff beaches as far north as Woody Head. The second lease was on Barri and Pippi beaches near Yamba and the third was on Angourie Back Beach.⁴ The onset of the Great Depression in 1929 prevented the development of these leases at that time and they lapsed in 1930.

TAMCo's interest was renewed in 1934 by William Henry 'Bill' Derrick, an Australian metallurgist. Derrick had obtained a diploma in metallurgy in 1912 from the Maryborough School of Mines in Victoria. For the next twenty years he worked as a metallurgist and assayer at various small gold mines in Victoria and New South Wales.

In the early 1930s he was living in Sydney and looking for work. An old friend, Albert Nelson Graham, a Mining Warden for the NSW Department of Mines, suggested that Derrick should consider entering the beach minerals industry. Graham thought it might be an idea for Derrick to apply for Dr. Newland's lapsed leases and hang on to them until such time as the Depression lifted as there might be an opening for him to enter TAMCo's services.



Mining black sand on Barri Beach in 1935. Porter & Derrick employed a horse-drawn cart to haul black sand back to the treatment plant for the first few months of operation. Horse and cart haulage was replaced by horse-drawn mine skips on the newly-constructed beach tramway in early 1936. Bill Derrick collection



Porter & Derrick used horse-drawn scoops on their beach mining leases, primarily to strip beach sand overburden off black sand deposits. The rear handle controlled the angle of the scoop blade: lowered down when filling the scoop with sand, held horizontal when pulling the loaded scoop to the dumping area, and raised to the vertical to dump the load. It was hard, demanding work for the scoop operator who also held the horses' reins around his neck to control the team. Jan Brown collection

Derrick secured the titles of Newland's Iluka, Yamba and Angourie beach leases in July 1934. He experimented with a separation process for the recovery of rutile and zircon from the rich black sand deposits on his leases. Tests on his separated concentrates came back 98% pure. He sent samples to TAMCo and offered his services. The Company responded by sending two of its officers to Yamba to confirm Derrick's claims: a mining engineer, Christian Skjold Anderson, and an accountant, George Calvin Porter. They were satisfied with what they found. TAMCo purchased Derrick's leases, though they were kept in his name, and employed him to run its subsequent beach mining operations.

Christian Anderson explained TAMCo's intentions to a local newspaper reporter soon after his arrival at Yamba in June 1935:

... Some years ago, his company had a touring agent here, who went over the sands at Yamba beach and the object of his (Anderson's) coming here now was to make arrangements for the installation of a concentrating plant with tables. These would be established on the beach, but it would be some months before they got going properly. The sands would be washed over the tables and any mineral contained therein would be bagged and shipped overseas. A start would be made in about a month, but it would only be a small installation, which would be enlarged later on."

"The Titanium Alloy Co was the pioneer manufacturer and producer of titanium minerals. The company had been in existence for over 30 years and in the United States especially, they had very large plants. The minerals were used in steel alloys and pigments and enamels, also, in the ceramic industry and for various chemicals. One of the minerals, zircon, was used in high temperature refractory bricks and cement."⁵

Anderson set up the first small treatment plant at Barri Beach, two kilometres south of Yamba, then returned home to America in 1936. George Porter, however, stayed on to

manage the local operation which became more commonly known as Porter & Derrick rather than TAMCo.

For the purposes of clarity, the Australian operation will be referred to as "Porter & Derrick" and the parent company in America as "TAMCo" for the remainder of this article.

Yamba Beach Mining Operations 1935 – 1937

Porter & Derrick's beach mining operations at Yamba centred on Newland's 20-acre mining lease GL1 which Bill Derrick had taken up in July 1934. It consisted of a 2½ kilometre long by 40-metre-wide strip of beach between the high-water mark and the frontal sand dunes. The lease ran the length of Barri Beach (also known as Mine Beach) and part of southern Pippi Beach up to the boundary of the Yamba urban area.⁶

Both beaches contained high-grade deposits of black sand which were rich in zircon. A typical deposit was a wedge-shaped layer up to two metres thick at the base of the dunes, tapering off in thickness as it extended down the beach towards the sea. Some deposits stretched for several hundred metres along the beach. Bill Derrick recalled in later years that:

There were frontal deposits right on the beach, but we also worked the dunes. The biggest heap of mineral was found at Yamba. We called it No. 1 and there was [a] ten feet [wide seam] of black mineral, ten feet thick carrying about 80% mineral.⁷

Small-scale mining began in July 1935 at the southern end of Barri Beach, close to the Treatment Plant. A horse-drawn scoop was used to clear beach sand overburden off the black sand layers. Labourers shovelled black sand into a horse-drawn cart to be taken back to the Treatment Plant.

In December 1935, Porter & Derrick began the construction of a light-weight narrow-gauge tramway to replace horse-drawn carts.⁸



Beach diggings at the northern end of Porter & Derrick's lease on Pippi Beach, Yamba. The 2km-long beach tramway ran south to the treatment plant at Barri Beach. Workmen are shovelling black sand into tramway skips stabled on short temporary spur lines. Bill Derrick collection

Lightweight steel rails were spiked to locally-cut wooden sleepers laid on the sand. The line, believed to be 2 ft gauge (610mm), eventually extended for over two kilometres northwards along Barri and Pippi beaches. Temporary sidings curved off the main line to follow black sand deposits down to the high tide mark. Horses hauled four-wheeled, side-tipping, steel-bodied mining skips between beach diggings and the treatment plant.

Some 12 men were employed initially with this number increasing to 25 as production was increased during 1936 and 1937. Most of the beach mining activity was done by men wielding shovels. It was hard physical work. Operations could be interrupted by heavy weather which sent storm waves surging up the beaches. A three-month shutdown in late 1936 – when the Treatment Plant's water supply dried up – resulted in sand drifts covering parts of the beach tramway. The local newspaper reported that it took two weeks to clear them off the line.⁹



A horse scoop was used to clear beach sand off black sand deposits at Yamba, but all loading work was done by men wielding shovels. Bill Derrick collection

By early-1937, beach mining had progressed northward to Pippi Beach, nearly two kilometres north of the treatment plant. Using horses to haul loaded tramway skips, one at a time, was taking too long. Porter & Derrick acquired a small three-ton Deutz diesel locomotive from Germany for this task. The diesel could haul a train of six loaded skips back to the plant, a significant improvement over horse haulage.¹⁰



Before the diesel locomotive arrived in early 1937, horses were used to haul single tramway skips filled with black sand back to the treatment plant. Bill Derrick collection

By the end of 1937 the company's 20-acre Yamba beach lease had been effectively mined out. Porter & Derrick recovered some 10,000 tons of mixed zircon-rutile-concentrates worth approximately £38,500 from Barri and Pippi beaches. From this they had to pay a 10% royalty fee worth £3,850 to the NSW Mines Department.

Porter & Derrick had only mined the easily-won rich deposits, mainly from the open beaches, by horse scoop and shovel. They were apparently unaware that similar deposits were buried in fossil beaches under the back dunes. There were

also large tonnages of black sand left in low-concentration deposits which were not economically recoverable by such primitive mining methods. These were all hoovered up by large companies using pontoon-mounted concentrator-dredges during the 1960s and 1970s.

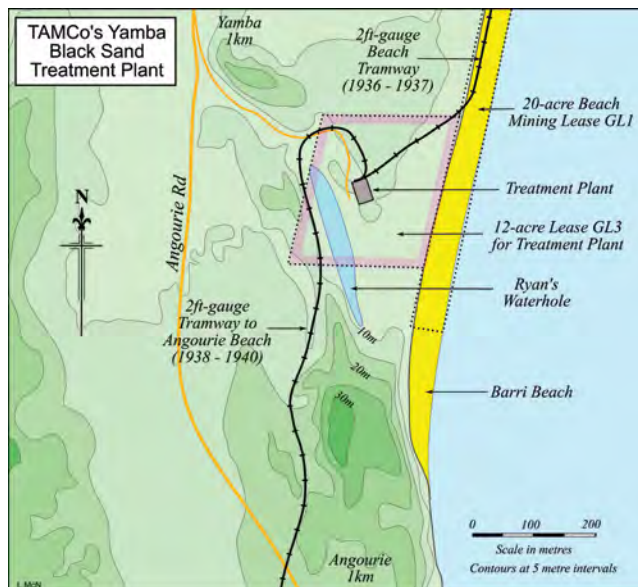
The Yamba Black Sand Treatment Plant: 1935 – 1940

In July 1935 Christian Anderson, TAMCo's newly-arrived American mining engineer, applied to the NSW Mines Department for a 12-acre mining lease upon which to erect a treatment plant.¹¹ The site was located close to Ryan's Waterhole at the southern end of Barri Beach and was set in scrub-covered sand-dunes about 150 metres behind the beach front. He erected a small plant on the lease to separate heavy black mineral grains from the lighter beach sands.

The treatment plant was housed in a very basic structure; essentially an open-walled shed with a galvanised-iron roof. Anderson spent two days setting up the main piece of equipment inside it – a single Wilfley Shaking Table – for the gravity separation process.

The Wilfley Table was a rectangular table with longitudinal riffles on its surface. It was inclined at a shallow angle and shaken by a compound eccentric to create a rapid horizontal reciprocating motion. Feed sand was fed in continuously at one corner of the top end and washed downslope with fresh water. The reciprocating motion carried heavy mineral grains off one end of the table while the lighter quartz sand grains were washed down to the bottom. The Wilfley process was well suited for black sand separation because the heavy mineral fraction (zircon, rutile, ilmenite, monazite, etc) had a specific gravity that was nearly twice as heavy as the lighter quartz beach sands.

Fresh water for the Wilfley Table was pumped from nearby Ryan's Waterhole, a semi-permanent coastal lagoon, into a battery of ten large corrugated-iron water tanks sited on a sandhill behind the plant. Ryan's Waterhole was not a reliable water supply and dried out during a prolonged dry spell in late



TAMCo's small treatment plant was located at the southern end of its mining lease on Barri Beach. It was set in the sandhills near Ryan's Waterhole which provided the plant with the fresh water it needed to operate its Wilfley Tables. Raw black sand was transported to the plant by narrow-gauge tramway; at first from Barri Beach then later from Angourie Beach.

1936. This caused a three-month shutdown with Porter & Derrick applying to the Mining Warden's Court in Maclean for a suspension of the labour conditions attached to its leases. The Company said in its application:

It was essential to have fresh water for the mining operations, and the application was based on the present scarcity of water. There was sea water there, but this was not suitable for the operations, which ceased on Monday week last owing to lack of water, and the position now was more serious than then. The lease was only workable with fresh water.¹²



A composite image of the Yamba Treatment Plant circa 1940. The raw sand unloading stage, with a tramway skip standing on top, is on the far left; the rectangular white shape (a corrugated iron structure) beside it is the raw sand feed hopper. On the far right is the waste sand stacker and a large pile of waste sand. The outline of the water storage tanks is visible behind the shed roof. A large part of the shed floor was used to air-dry black sand concentrates. Bill Derrick collection



The treatment plant required a steady supply of fresh water to operate the Wilfley Tables. This was pumped from nearby Riley's waterhole into a battery of ten corrugated iron water storage tanks set on a sand hill behind the plant. Water gravitated down a pipeline to the plant. Bill Derrick collection

Beach-mined sand was shovelled into the boot of a small conveyor-belt elevator situated beside the shed. The elevator lifted sand up to a small receiver from where it was gravity-fed with the aid of sluice water to the Wilfley Table.

The construction of the beach tramway in 1936 required changes to the sand feed system. An external feed hopper made of corrugated iron was installed to supply the elevator boot. The beach tramway terminated on an elevated timber stage beside the hopper. Side-tipping tramway skips on the stage dumped their loads directly into the hopper. After the diesel locomotive was acquired in 1937, the dumping station was expanded to allow two skips to unload at a time.

Power to operate the treatment plant was supplied by a stationary engine – possibly a re-purposed motor lorry petrol engine – located inside the shed. It drove an overhead line shaft from which a series of pulleys and belts powered the Wilfley Table and the feed elevator. As production increased the engine provided power for more equipment which included four Wilfley Tables as well as the raw sand, waste sand and concentrate elevator stackers.



The treatment plant had four Wilfley Tables. Black sand concentrates were shaken off the near side of the tables into side troughs and sluiced down to the small elevator stacker visible in the background. A large pile of air-drying concentrates is visible behind the stacker. Bill Derrick collection



A small conveyor transferred raw black sand into the treatment plant, raising it high enough to gravity-feed onto the Wilfley Tables. Labourers shovelled sand onto the conveyor for the first few months, until the beach tramway was commissioned. Jan Brown collection



The beach tramway terminated on an elevated timber stage above a sand feed hopper (the white structure) which fed the belt elevator taking sand into the plant. Bill Derrick collection



A pair of side-tipping tramway skips have just dumped their loads of raw black sand into the plant's feed hopper. A small belt elevator inside the hopper transferred sand into the plant to be separated by the Wilfley Tables. Bill Derrick collection

A small elevator stacker dropped the heavy wet concentrates produced by the Wilfley Tables onto piles on the shed floor. Workmen used shovels and wheelbarrows to move the piled concentrates to the front of the shed and spread them on the floor to air-dry. When dry, the men manually filled paper-lined jute bags with black sand for shipment to America. Filled bags weighed a hundredweight (50 kg) apiece - heavy loads for workmen to fill, move and stack.

The treatment plant's initial output was a modest 25 tons a week during the first few months of operation. In November 1935 a second Wilfley Table was added, followed by another two in early 1936.¹³ The air-drying portion of the shed was extended to hold up to 2000 tons of black sand. A sand stacker was installed to convey waste sand from the Wilfley Tables to a large heap behind the plant. By the end of 1936 production had increased to over 200 tons a week.

Bagged black sand was taken by motor lorry for the short trip to Yamba wharf on the lower Clarence River. The road trip provoked a lively correspondence between Porter & Derrick and Harwood Shire Council over the state of the public road between Yamba and Angourie. The Company kept the northern portion of Angourie Road in repair, at its own expense, to enable its heavily-loaded lorries to get to Yamba. It wanted to be compensated for damage caused by Angourie-bound traffic. The cash-strapped Harwood Council was reluctant to concede. A contribution from the Mines Department, which benefited from the 10% royalties paid by Porter & Derrick, was needed to settle the claim.¹⁴

The approaches to Yamba's shipping wharf were too shallow for coastal steamers, an unfortunate side-effect of the Clarence River training walls constructed around the turn of the century. Porter & Derrick's bagged concentrates had to be loaded aboard shallow-draft steam launches at Yamba and taken 20 km upriver to Maclean's deep-water wharf. By 1937 the river-launch transport leg had been dispensed with, and bagged black sand was being taken by Eggins Ltd.'s motor lorries direct to the Maclean steamer wharf.

During the 1930s, the North Coast Steam Navigation Company was still running a bi-weekly cargo steamer service between Sydney and Grafton, up the Clarence River. Porter &



A small elevator stacker, fitted with a swivelling chute, dropped soaking wet concentrates produced by the Wilfley Tables onto piles on the shed floor. When partly dry the shed crew wheelbarrowed the heavy sand to the main drying area. Bill Derrick collection

Derrick's bagged concentrates were taken onboard at Maclean and shipped to Sydney where they were loaded onto overseas vessels for the long sea voyage to New York. From there they were shipped to TAMCo's factory at Niagara Falls. Individual cargoes were initially on the small side - 200 to 400 tons (4,000 to 8,000 bags) - but increased as production and demand increased. By 1940 cargoes weighing up to 1000 tons (20,000 bags) were being shipped every three months or so.¹⁵

The treatment plant remained in operation until September 1940 when Porter & Derrick had effectively mined out its Yamba and Angourie beach mining leases. It was then removed to Cudgen on the NSW far north coast where the company had secured another large beach mining lease.

TAMCo's Deutz Diesel Locomotive

In early 1937 Porter & Derrick acquired a small Deutz diesel locomotive to replace horse-haulage at their beach mining tramway at Yamba. It was a 600 mm gauge 4wDM locomotive, Deutz B/n 18306 of 1937, manufactured by Humboldt-Deutz Motoren AG, in Cologne, Germany.¹⁶



The small Deutz diesel locomotive (Bn 18306 of 1937) posed with six loaded side-tipping mine skips on Porter & Derrick's beach tramway on Pippi Beach in 1937. It faces a 2 km trip south along the beach to the treatment plant. There is no shelter for the driver. He, like the labourers wielding shovels on the beach, was expected to work in all weathers. Bill Derrick collection



Deutz Bn 19531 of 1937 is preserved in running order at the Amerton Railway in Staffordshire, England. It is one of Deutz' Model OME117F diesel locomotives, the same as TAMCo's Bn 18306 of 1937, and it was also outshopped from the Cologne, Germany, works in March 1937. John Browning collection

No.18306 was a standard Deutz Model OME117F locomotive weighing three tons and powered by a 13 hp single-cylinder, two-stroke, water-cooled engine. It was fitted with a four-speed forward and reverse mechanical gearbox, something of a luxury in locomotives of this size. Ruston & Hornsby diesels of similar size only had two-speed gearboxes. The locomotive was fitted with fore and aft cast-iron ballast weights to improve adhesion. These were bolted to the chassis under the running board and increased the overall weight to four tons.

No.18306 was outshopped on 5 March 1937 and arrived in Sydney in May 1937. It is believed that it was shipped on board the German cargo steamer *Hanau* which departed Bremen on March 19 and docked in Sydney on May 13. Australian Customs Duty Entries for Sydney for this period include a diesel locomotive "for use in mines" imported from Germany.¹⁷

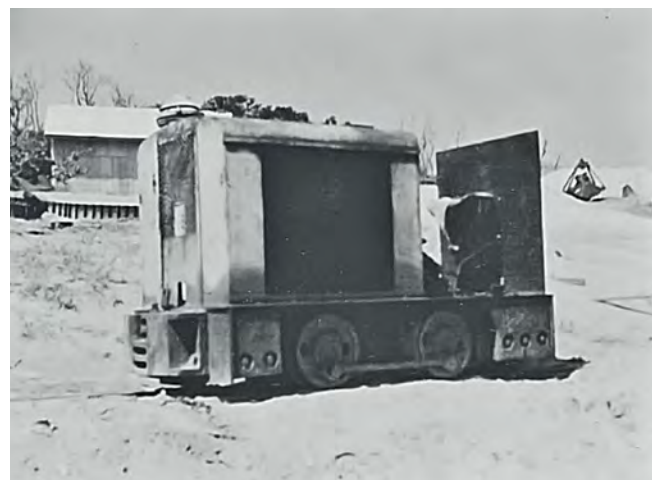
Deutz manufactured a large number of diesel locomotives – 27 of this type being made in March 1937 alone – but No.18306 is noteworthy as being the only German-manufactured diesel locomotive that came to Australia between WW1 and WW2. Records held by Klöckner Humboldt Deutz show that Bn 18306 of 1937 was ordered by W A Fritze & Co, Bremen for Herbert del Cott Pty Ltd in Australia.

Austrian-born Herbert del Cott was an interesting character. He was a well-connected entrepreneur and had his own electrical, engineering and supply company with registered offices in the main capital cities. He represented several German companies in Australia including Humboldt-Deutz Motoren AG. He was also the Austrian Consul for Victoria, Tasmania, South Australia and Western Australia.

Although no record has been found of Porter & Derrick

placing an order with Herbert del Cott, it is believed that this is the case. Their intention to acquire a diesel locomotive "early in the New Year" was recorded in the 1936 Annual Report of the NSW Department of Mines.¹⁸ Bill Derrick said many years later in his 1976 interview by Ian Morley that: "I bought a small diesel locomotive in Sydney to haul my trucks, prior to that we had horses hauling the trucks."

The small Deutz diesel locomotive entered service on the beach tramway at Yamba in May 1937. It hauled side-tipping



Porter & Derrick's Deutz (Bn 18306 of 1937) diesel locomotive out of service at Cudgen Beach in September 1955. It was taken to Cudgen in 1940 after the company had mined out its Angourie Beach lease. The rectangular shapes bolted onto the chassis under the running board are cast-iron ballast weights, added to give the lightweight 3-ton locomotive better adhesion. Bruce Macdonald collection

mine skips full of black sand from the beach diggings back to the treatment plant and returning with empty skips. Six filled skips appear to have been a maximum trainload for the locomotive. Although the Deutz was a 600 mm gauge locomotive, and the beach tramway a slightly-wider 2 ft-gauge (610 mm) line, this does not appear to have been a problem for either Porter & Derrick or the locomotive.

Beach mining operations shifted to Angourie Back Beach in 1939 and the Deutz was employed hauling full and empty skips over a newly-laid 2¼ mile cross-country line between the Angourie beach diggings and the Yamba treatment plant.

Porter & Derrick finished their mining operations at Angourie on 7 September 1940, stating that their GL2 lease had been mined out. They relocated their beach-mining operations to Cudgen along with the treatment plant, tramway, rolling stock and the Deutz diesel locomotive.

In 1955 TAMCo invested in two 60-tons per hour dredge-mounted concentrators to rework its narrow Cudgen beach lease. This marked the end of beach tramway mining practices. The last known record of No.18306 is a photograph of the locomotive taken at Cudgen on 30 September 1955 with the words "Not used" written on the back. Its subsequent fate is unknown.¹⁹

Angourie Beach Mining Operations 1939 – 1940

By mid-1937 Porter & Derrick were close to mining out their GL1 lease on Pippi and Barri beaches at Yamba. They began making plans to move their mining operations to their GL2 lease at Angourie Back Beach. In July 1937 they applied to the Mines Department for permission to construct a 2¼-mile (3.6km) tramway from its Yamba treatment plant to Angourie Back Beach. A mining lease, GL5, for the tramway was granted in the following month²⁰ and by the end of the year the tramway had been laid.

The lightly-built, 2 ft-gauge tramway departed from the loading stage at the treatment plant. It avoided the high sand dunes flanking the southern end of Ryan's Waterhole by curving around the north end of the waterhole before turning south to head towards Angourie Beach. The line crossed

undemanding terrain. Old sand dunes covered in scrubby heath predominated for the first kilometre. There was a slight uphill grade where the line climbed up and over the low ridge west of Angourie village. After crossing the 25-metre-high summit of the ridge there was an easy downhill grade to Angourie Back Beach, with the line curving back east to avoid the swamps and marshes bordering Mara Creek. The few earthworks consisted of small cuttings through shallow sand ridges.

Unfortunately for Porter & Derrick, TAMCo's Niagara Falls works stopped taking shipments of black sand concentrates from Yamba at the end of 1937. There was an industry-wide downturn due, it was said, to concerns of an impending war in Europe. The newly-built tramway to Angourie Beach had barely been commissioned when the Yamba operation was shut down in early 1938 and 25 men were thrown out of work. The treatment plant had 1000 tons of concentrate on the drying shed floor ready for bagging – it had to remain there for over a year.²¹

Towards the end of 1938, TAMCo was apparently confident enough that economic conditions were improving, and they shipped six new tramway skips for the Angourie tramway to Maclean wharf which arrived in September 1938.²²

Concentrate shipments were resumed in January 1939 and by March all the stored stock at the treatment plant had been bagged and shipped off to America. In April 1939, after a 17-month shutdown, full operations were resumed. The treatment plant was overhauled and put back in operation. Twenty men were put on: half at Angourie, the other half at the treatment plant.²³

Porter & Derrick mined the 32-acre GL2 mining lease at Angourie Beach that Bill Derrick had pegged out back in July 1934.²⁴ Similar to the Yamba lease, it consisted of a long narrow strip of beach between the high-water mark and the back dunes. The Mines Department reported that in 1939 seams of black sand varying from one to two feet in thickness were being mined over widths of between 30 to 400 feet. Sixty tons of mined sand was being treated per day for a return of 30 tons of zircon-rutile-ilmenite concentrate.²⁵



Porter & Derrick mined their 32-acre lease G.L.2 on Angourie Back Beach during 1939 and 1940. The narrow-gauge beach tramway that transported mined sand to the treatment plant exited the beach just beyond the low, light-coloured cliffs in the middle distance. Warwick Hoad



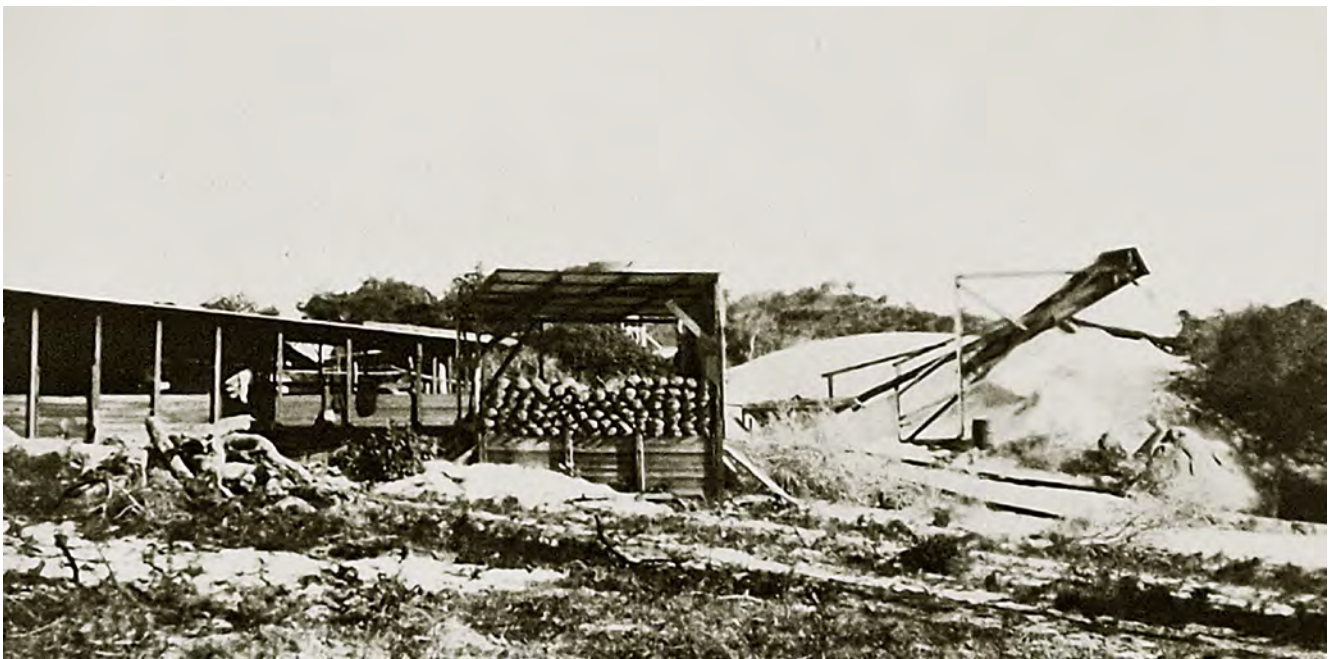
Black sand concentrates were air-dried in heaps on the treatment plant floor. The shed crew filled paper-lined jute bags with one hundredweight (50kg) of sand apiece. Filled bags were wheel-barrowed outside to the loading platform, ready to be taken by motor lorry to Maclean wharf. Bill Derrick collection

It is believed that the Yamba beach tramway, being no longer needed, was pulled up and re-laid along the length of Angourie Beach. A horse scoop was used to remove overburden and drag black sand to the tramline where, according to Bill Derrick, a small loader was employed to fill tramway skips. The 13 hp Deutz diesel locomotive shunted full and empty skips along the beach and hauled rakes of loaded skips back to the treatment plant.

When operations had resumed in April 1939, local newspaper reports were confident that they would continue for many years to come – one even stating: “for an indefinite

period.” Alas, this confidence was misplaced. By September 1940 Porter & Derrick had mined out their Angourie Back Beach lease and finished all operations there on the sixth of that month.²⁶

The black sand deposits on Angourie Back Beach were not as rich as those on Pippi and Barri beaches. However, Porter & Derrick still managed to recover a respectable 8700 tons of concentrates valued at £29,920 from their variable-width lease by extending their mining operations into the back dunes. All of this was shipped to TAMCo’s Niagara Falls works in America.



Bagged concentrates stacked on the small, covered loading stage outside the treatment plant, ready to be trucked to the Maclean steamer wharf. The waste sand stacker and a large pile of waste sand can be seen in the background. Bill Derrick collection

**TAMCo's Annual Production of
Black Sand Concentrates from
Yamba and Angourie**

Year	Tons*	Mined From
1935	365	Barri Beach
1936	4,000**	Barri & Pippi beaches
1937	6,705	Barri & Pippi beaches
1938	<i>no production</i>	
1939	2,347	Angourie Back Beach
1940	6,359	Angourie Back Beach
<hr/>		
Total	19,786 tons	

* from Mines Dept Annual Reports

** estimated from reported zircon content

TAMCo's production of black sand from Yamba and Angourie was small by modern standards but was quite substantial for the times. The whole output was shipped to the parent company's Niagara Falls plant in America.

The Angourie Crocodile

No history of the Angourie enterprise would be complete without mention of the mysterious "Angourie Crocodile", a story which was reproduced in several newspapers around the State at the time. The events were best described by the *Grafton Daily Examiner* on 30 November 1939:²⁷

An extraordinary adventure was related yesterday by Mr. Max Rutledge, of Coldstream Street, Yamba, who is employed by the Beach Mining Company, as locomotive driver on company's light railway, which runs from the treatment works to Angourie beach. At about 10.30 a.m. Rutledge left the works with a load of empty trucks for Angourie. At a portion of the line which runs close to the swamp, near Angourie Creek, he noticed a log close to the line. Not having seen a log at this spot during the hundreds of times he had passed, and wondering how it came to get there, he stopped his engine to investigate. To his horror, the "log" rose from the ground and revealed itself as a crocodile of a length of 15 feet." "Thinking the saurian was going to charge he jammed his loco into gear and wasted no time in getting to the beach. The monster, however, made for the swamp. Rutledge, who described its front legs as being about the same size as a man's arm, reached the beach in a state of great excitement. The story has aroused intense interest in the town. How the saurian arrived at Angourie is a mystery. It is understood that a party is being organised by Constable Jackson to try to locate and despatch the monster.

Max's report aroused great excitement. Local residents said they had heard unusual bellowing coming from the swamp and that for many months cattle, and particularly calves, had disappeared. Old residents in Yamba remembered that a travelling circus brought a sick crocodile to Yamba to bathe in salt water for treatment and, allegedly, it escaped and disappeared into the bush. The local constables organised a search party but could not find any traces in the thick growth of weeds and grass. Two weeks later, the Company's caretaker at Angourie Beach reported that he had been awakened at

midnight in his hut by blood-curdling bellowing close outside his door and, terrified, he had barricaded himself inside. In spite of all the interest, excitement and several searches, no crocodile was ever found.

Bill Derrick, however, added credibility to the tale in his 1976 interviews with Ian Morley:

We used to haul the loaded trucks from Angourie Beach to the treatment plant at Yamba. We used to run a trip pretty early in the mornings – eight trucks – take them to the separating plant and treat them at Yamba. The railway and trucks were better than messing around with horses and cart, and every morning I used to go around and go with the truck driver to see that he finished up with a load and followed our directions. Our accommodations were opposite to the plant, and I used to go down with the lad and have a ride down and we'd talk, you know, and one morning I didn't go. Something prevented me at the plant, and next thing I look down the railway line and there's our engine driver coming up the railway line like a mad man, he was that excited and he came rushing up to me and I said, "What's the matter?" He said, "Come back here and gaze at the great big crocodile there." I said "Right." I jumped in the truck and went back with him to Angourie to see the great big crocodile there. The footprints indicated that. I didn't actually see it myself.²⁸

Post-Angourie Beach Mining

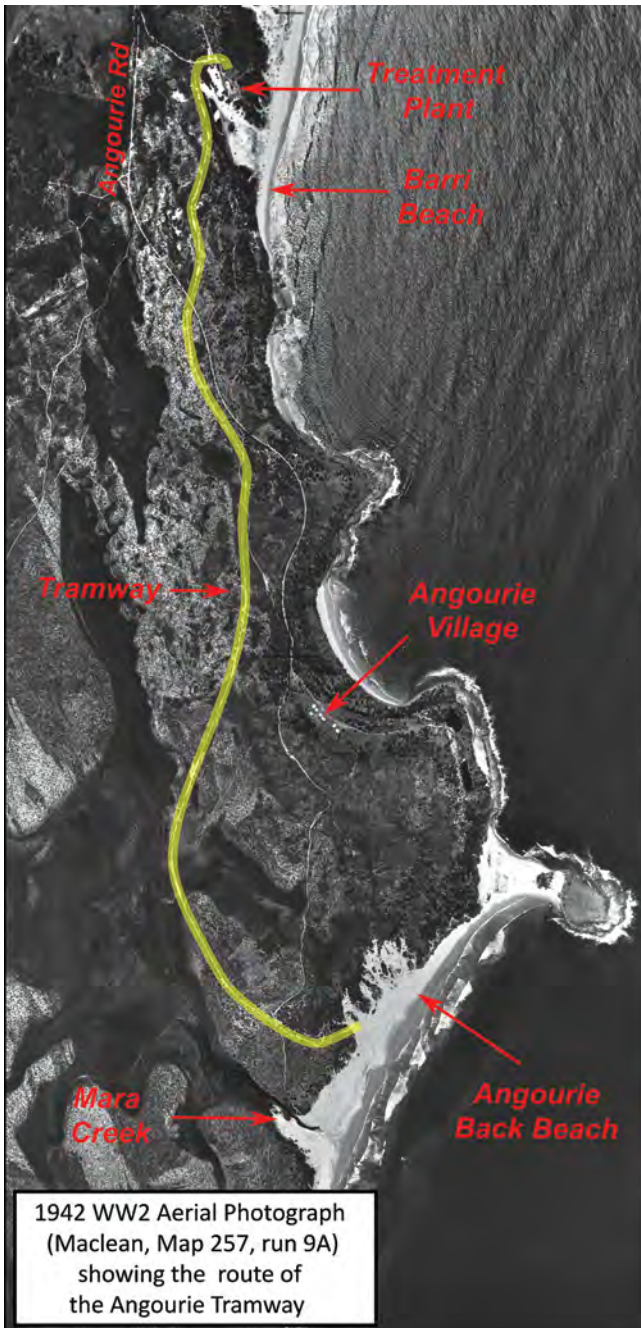
The September 1940 finale at Angourie Beach was by no means the end of Porter & Derrick's association with black sand mining. Zircon, rutile and ilmenite were classed as strategic war materials during WW2 and demand for them increased dramatically. Porter & Derrick were among several local companies who rose to meet the challenge.

Bill Derrick had taken up Dr D H Newland's 72-acre mining lease on Iluka Beach in July 1935 but had surrendered it in 1938.²⁹ Apparently its black sand deposits were not rich enough for Porter & Derrick to economically mine. Instead, Derrick prospected several beaches south of Angourie, searching for additional economic deposits of black sand. He discovered a good prospect on Wooli Beach, 40 kms south of Angourie as the crow flies, and in February 1940, took out a 10-acre mining lease there.³⁰

A small treatment plant and a short beach tramway were constructed and a few Angourie men were sent down to work them. Bagged concentrates were taken by motor lorry to Grafton, shipped to Sydney by coastal steamers, and sent overseas to TAMCo's Niagara Falls factory in America. By 1942 the Wooli lease had been mined out and the operation was closed down.

The Wooli operation was only a sideshow, with Porter & Derrick's main effort being focussed on Cudgen Beach on the far North Coast. They purchased a beach mining lease on a royalty basis from Arthur Jay Knowles, a Canadian-born mining investor who had prospected and unsuccessfully tried to develop the local black sand deposits in the 1930s.

In September 1940, Porter & Derrick sent most of their Yamba and Angourie employees north to Cudgen along with the Yamba treatment plant equipment plus the Deutz locomotive, rails and rolling stock of the Angourie line. Increasingly large tonnages of concentrates were produced from Cudgen and sent overseas to TAMCo during the war years. Local wartime demand for rutile increased rapidly, so much so that in 1943 the Australian Government banned the export of mixed concentrates, requiring that they be first separated into high grade titanium and zirconium concentrates. Porter & Derrick were obliged to install additional equipment sent out by TAMCo to separate concentrates into their individual mineral species.



During WW2, The RAAF took aerial photographs of many parts of Australia for military purposes. This 1942 aerial photo of Angourie clearly shows the route of Porter & Derrick's tramway, even though the rails had been pulled up and sent to Cudgen two years previously.

Management of the Cudgen operation continued under the name of Porter & Derrick until 1948 after which it reverted to the name of the parent American company – TAMCO. TAMCO became the largest producer of rutile in Australia in the 1950s. After exhausting its NSW leases in 1965, it merged with the Titanium Metal Corporation of America to form Queensland Titanium Mines Pty Ltd and moved its operations to Queensland

George Porter, by then in his 70s and in poor health, died in a Brisbane hospital in October 1944. Bill Derrick continued his association with black sand mining for many years, finally passing away in Sydney at the age of 87 in May 1977.

Acknowledgements

I am grateful to the following colleagues who contributed their information, expertise and assistance for this article:

John Browning for detailed information of Deutz diesel locomotives; Jon Henry for in-depth research carried out at the Fryer Library, University of Queensland; Warrwick Hoad for Angourie local history and field investigation; Rob Knight for Yamba beach mining history and field investigation, and Phil Rickard for supplementary Trove research.

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Number 83 leaving the passing loop at the old quarry site with its load of 40-ton cast concrete blocks. The view beyond is up river with the wharf crane at Iluka on the extreme right in the far distance. The timber piles of the Middle or Freeburn Island training wall are just visible above the surface of the water. September 1969. Photo: Alex Grunbach courtesy ARHSnsw

Diesels at the Clarence River Breakwater Works

by John Browning

Ian McNeil's excellent series of articles on the Clarence River Works[‡] provided plenty of encouragement for on-site investigations. In September 2019, I was fortunate enough to be shown around a number of the sites of interest by Jon Henry. At the same time, thanks to local resident Stuart Hibberd, we were able to meet John Irons. John was Leading Hand Fitter – Plant Repairs & Maintenance, at Ilarwill quarry and subsequently became Mechanical Foreman for the five years before the river works were halted in 1971. His work involved weekly visits to the Clarence Heads to inspect the locomotives and cranes, so he is a mine of information about some additional aspects of the project, including railway operations. His journey to the Heads from the quarry in those days was done by launch in less than an hour; the overland journey took a lot longer at that time, in particular to Iluka given that there were three ferry crossings to negotiate and the distance by road was 50 per cent further.

This short article provides some additional information from John Irons and some extra details about the Ruston & Hornsby locomotives that featured in Ian's article in LR 268. Some of this information was published in the ARHS NSW *Digest* in August and September 1969, and is supplemented from previously unpublished photographs, some from Peter Neve and others from the ARHS collection, many of which

[‡] Light Railways 245, 248, 255, 262, 268 – all available free Online

were taken by Alex Grunbach. Thanks are due to Bruce Belbin for assistance in sourcing the ARHS images. Unattributed information is taken from Ian McNeil's article in LR 268, photographic evidence, and the interview with John Irons.

The two Ruston & Hornsby Model 165DS 0-4-0DM locomotives were ordered from Ruston & Hornsby (Australia) Pty Ltd by the NSW Department of Public Works in November 1950. Built in Lincoln, England, builder's number 310085 was despatched on 29 February 1952 and arrived in Sydney in June. Builder's number 313393 was despatched on 30 July 1952.¹ Such delivery delays were common among British manufacturers in the difficult post-war period when shortages of materials and components were the norm.

Stored in Sydney during a lull in the construction works at the Clarence before being sent north, they had both been commissioned at the Ilarwill quarry workshops by early June 1954.² One was intended for use at the quarry and the other for tipping stone at the estuary breakwaters. Number 83 (B/n. 313393) was in use on the breakwater at Iluka by August 1954,³ while there is an early photo of number 82 (310085) in the quarry at Ilarwill.

John Irons states that the Ruston locomotives had a beautiful 6-cylinder diesel engine – quiet, slow-revving and powerful. Transmission was a combination of air, hydraulic and mechanical, causing some head scratching until its operations were mastered. Starting up was by compressed air. If there was insufficient pressure in the air reservoir to start the main engine, the locomotive had an auxiliary 2-cylinder engine that could be fired up to drive a small compressor to create the air pressure required. Once the main engine was started, one of the two compressors driven off it kept the air reservoir charged.



Although this is a poor photo, it demonstrates that it was No.82 that was first put to work at Ilarwill quarry. Photo: Maclean District Historical Society courtesy Ian McNeil

Duties at Ilarwill would primarily have been shunting trucks in the quarry and hauling stone to the riverbank for loading onto punts, not strenuous tasks. Once the stone arrived at Iluka, the electric derrick crane had sufficient reach to allow for the loading of a rake of trucks, and stockpiling if needed. The locomotive stationed at Iluka handled the task of hauling stone to the end of the advancing breakwater for tipping.

In October 1959, a concrete batching plant and gantry loading crane at Ilarwill were commissioned, significantly increasing the quarry output, and at the beginning of 1960 tipping for breakwater construction was transferred from the northern breakwater at Iluka to the southern breakwater at Yamba. Two tugs and two outboard-powered punts were used to deliver stone and blocks to Yamba each working day. To deal with the workload, a second locomotive was needed at Yamba.

The portal crane used for unloading there had insufficient reach to allow a stationary train to be loaded, or for significant stockpiling of stone or concrete blocks to occur, so it was necessary to have one locomotive ready to shunt wagons under the crane whenever a loaded punt arrived while a second took stone and blocks to the breakwater head for tipping.

In order to free up the second Ruston & Hornsby locomotive for use at Yamba, a small internal-combustion locomotive was built at the workshops at Ilarwill for quarry duties. Known as the “winch loco”, it was based on a flat top quarry truck chassis and was the vehicle that could easily be mistaken for a brake wagon. A photograph of it at the quarry is on page 14 of LR 268 and on page 19 is a later photograph of it loaded on a punt at the Yamba wharf. This loco was powered by a Ford V8 petrol engine which formed part of a repurposed winch with two chain drives connected to the one axle, one for each direction of travel. In April 1969, it was reported anonymously that the winch loco, carrying No.694, had been noted at work in the quarry fitted with a Perkins diesel engine.⁴ John Irons states that it retained its Ford V8. Many of these Ford engines, often with attached ancillary equipment, had been available as surplus after World War II and were widely dispersed in Australia.

The standard PWD locomotive livery was light grey with black underparts. Poor early photos show the Ruston & Hornsby locomotives lettered PUBLIC WORKS DEPT along the side of the hood and PWD No 82 and PWD No 83 on the lower cab side.

John Irons reported that the cab of one the locos had been badly damaged by a falling rock and that a replica replacement cab was built at Ilarwill. Photographic evidence suggests that the new cab was for number 83 and that it was operating with this cab at Iluka in December 1965. By this time, both locomotives had been modified by the addition of a shunter's platform and safety rail at the leading end.⁵



On 2 December 1965, both Ruston & Hornsby locomotives were at Iluka, number 83 on the left and number 82 on the right. Photo: Peter Neve

Number 83 in the shadows of the electric crane at Iluka. Telling the two locomotives apart in the absence of painted numbers is largely reduced to an exercise in rivet counting. 2 December 1965. Photo: Peter Neve



Number 83 at the Iluka tip end. The 40-ton concrete block manufactured at Ilarwill is about to be launched off the end of the breakwall. 2 December 1965. Photo: Peter Neve



An October 1969 photograph of number 83 apparently painted red appeared in ARHS *Bulletin* 686. Earlier that year it had been reported that both locos were grey.⁶ Newly-available photographs show that by October the locomotive had been painted red on one side but was predominantly grey on the other. By then they had been numbered PWD 82 and PWD 83 in weld on the rear buffer beam. PWD 82 also carried NSW PWD PLANT 82 painted on the cab side.

In 1969, number 83 was running with what appeared to be a cylindrical auxiliary fuel tank mounted on the cab roof, but Ron Preston's 1971 photo (LR 268 page 8) shows that number 82 could also operate with this feature.

The information provided in LR 268 indicates that breakwater construction operations occurred as follows:

- June 1954 to December 1959 Iluka
- January 1960 to May 1963 Yamba
- May 1963 for a few months Iluka
- a few months after May 1963 to July 1964 Yamba
- after July 1964 to July 1968 Iluka
- late 1968 to May 1971 Yamba

As can be seen, operations were transferred from one side of the river to the other five times during the period of post-war breakwater construction. Although it has been claimed that there was only a need for one locomotive to work at Iluka at any one time, both were there when Peter Neve visited in December 1965.

Tipping the stone was a delicate operation. First, the stone truck was secured to the track to prevent it from taking an unscheduled dip in the ocean. Then the shackle securing the rock to the truck was unfastened. Next the bed of the truck was elevated to the tipping point using a 20-ton hydraulic jack. As the tipping point was reached, it was necessary for the operator to get well clear to avoid any danger from the falling rock. As the load fell, the jack could also fall down onto the rocks, sometimes incurring damage that required repairs at the Ilarwill workshops.

At Yamba, in the last phase of operations, rail operations were described by a visitor, Harry Calf.⁷ The two Ruston & Hornsby locomotives were in use, and each was coupled to an empty stone wagon fore and aft to act as spacers in case of accident.



The passing loop on the Yamba side was situated close to the location of the original Yamba quarry – the sign indicating that camping is prohibited. Number 83 pauses in the loop while its driver watches number 82 pass with concrete blocks ready for tipping. Both locomotives have a “runner wagon” fore and aft to reduce the risk of damage should a tipping mishap occur. Number 83 has the roof-mounted oil drum but number 82 appears to have roof mountings for the same purpose. September 1969. Photo: Alex Grunbach courtesy ARHSnsw

Number 82 and train at the Malcolm Moore portal crane on the Yamba wharf where stone or concrete blocks were transhipped from water to rail transport. Of interest is the timber crate containing loose rubble on top of one of the trucks. September 1969. Photo: Alex Grunbach courtesy ARHSnsw



Number 83 waits at the Yamba crane wharf with loaded trucks for number 82 to return with empties. September 1969. Photo: Alex Grunbach courtesy ARHSnsw

The two locomotives at the Yamba crane wharf. While number 83 was painted red on the river side, this photo shows that it retained significant sections in grey on the landward side. Number 82 has red trimmings to go with its grey paint scheme. 3 October 1969.
 Photo: Alex Grunbach courtesy ARHSnsw



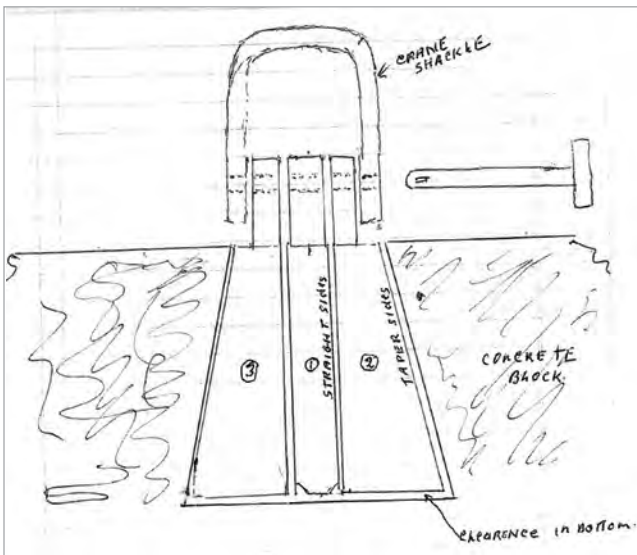
Another image of the two locomotives at the Yamba crane wharf. The deck of the tipping truck consisted of short parallel lengths of railway line designed to enable the boulder or concrete block to slide off with a minimum of trouble. Unfortunately, this laudable aim was not always successfully achieved. 3 October 1969.
 Photo: Alex Grunbach courtesy ARHSnsw

Number 83 proceeding towards the breakwall with its load, overlooked by Pilot Hill. The locomotive's rooftop oil drum affords few aesthetic benefits. 3 October 1969.
 Photo: Alex Grunbach courtesy ARHSnsw





Left: Number 82 at the Yamba portal crane on 30 July 1971 ready to be loaded onto a barge for transport back to Ilarwill following the completion of the breakwalls. Number 83 had already been taken away by then. Photo: courtesy ARHSnsw
Below left: John Irons' sketch of the block lifting device.



One loco shunted the empty stone trucks beneath the portal crane to enable the loading of the large stones and concrete blocks for their journey to the end of the breakwater, while the other worked on the breakwater itself. The first locomotive sometimes worked a loaded train from the wharf to the crossing loop located near the old quarry at the start of the main breakwater, returning with empties placed there by the second unit. Between this first crossing loop and the end of the breakwater were two short dead-end sidings. One was used for the storage of loaded wagons awaiting tipping and the other one, nearer the breakwater end, was used to store empty wagons after their loads had been tipped. There was a second loop near this outer siding to enable the locomotive to run around.

The arrangements at Iluka were similar, although there was no need for a loop for crossing, only run round loops being required. There were three dead-end lines at the Iluka end. One ran on the timber decking and terminated at the end of the wharf. One ran under the 40-ton electric crane and terminated upstream of it. There was also a branch line that terminated at the engine shed on the landward side of the 40-ton electric crane. Two tracks ran under the portal crane at Yamba. It is unclear if they once formed a run round loop, but if so it had gone by 1969. There was no engine shed at Yamba.

A number of other interesting observations by John Irons on the article in LR 268 include the following:

- The photo of the crane on page 10 is not at Ilarwill but at Iluka, and it is printed mirror image
- The upper photo on page 13 is also reversed
- The steam cranes at Ilarwill were converted to compressed air operation powered from the stationary compressor there, resulting in cleaner operation and less driver work.
- The photo on page 22 shows three 40-ton concrete blocks with a shackle in place on top of each. The shackles were not screwed into the blocks but were attached to a specially-made three-piece lifting device placed within the cavity cast into the top of each block. Inserting the three components of the steel lifting device inside the cavity attached it securely to the concrete block with the shackle pin holding everything in place. The devices were made at Ilarwill and once each block was loaded onto a stone truck at the Heads, the shackle pin was withdrawn allowing the lifting device to be removed and returned to the block making plant at the quarry.

As stated in LR 268, when work on the breakwalls ended, the locomotives were moved by water to Ilarwill pending disposal at auction. Number 82 was photographed on 30 July 1971 at the Yamba portal crane about to be loaded onto a barge. It seems that number 83 had already left for Ilarwill by then. B&H Disposals of Silverwater in Sydney purchased the two locomotives at the disposal sale held in February 1973. In July 1974, they were moved to Simsmetal at Mascot where they were used for shunting. Number 82 was scrapped in November 1979. Number 83 was re-engined in 1979 but it was out of use in June 1985 and was subsequently cut up.

Acknowledgments

Sincere thanks to John Irons, Stuart Hibberd, Jon Henry, Ian McNeil, Peter Neve, Bruce Belbin, and ARHSnsw.

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8A at Crowes in 1912. Photo: Nick Anchen collection

Stories from The Otways

by Nick Anchen

Introduction

To continue our recognition of the fact that the Colac to Beech Forest line closed 60 years ago (see the back page of LR 286) we feature some more memories of the line. As part of his research for his books, Nick Anchen interviewed several old time Otway district personalities in 2011. Here are their stories.

OTWAYS SAWMILLER – JACK EATON

My first sawmilling job in the Otway Ranges was in 1952, at Keith King's sawmill near Pile Siding, a few miles from Weeaprounah. There was a crew of eleven who operated the mill, and I worked for a bloke named Abe Sprague. The power plant was a single cylinder, two-stroke, 75 hp McDonald diesel engine, which came from Richmond. We milled mixed species, particularly mountain ash, and I was No. 1 benchman for Keith King. I lived in a little timber hut, and I remember the trains heading to and from Crowes passing very close, as the railway ran right next to my hut.

After about 18 months there, in 1954 I spent two years working at Norm Gordon's Apollo Bay sawmill, before moving back to the Beech Forest area. I met my wife, Alice Cashin, in 1953. She was the daughter of the Cashin sawmilling family, which included Jim, Ted, Tom, and Arthur Cashin, all of whom were competition axeman. In 1956 Alice and I purchased a 45-acre bush block at Ferguson. I cleared the block with a bulldozer, and we grew spuds and had milking cows.

Beech Forest pulpwood

From 1956 until 1960 I worked in the Forest Commission's softwood plantations in the Aire Valley, about 20 or 30 minutes drive from Beech Forest by slow truck. Six thousand acres of softwood trees were planted in the Aire Valley in the 1930s, including Oregon, Radiata Pine, Redwood and Spruce.

There were six teams of cutters working the plantations, each with two blokes. We had to provide our own truck to cart the timber out to the railhead at Beech Forest, and we did not have chainsaws, so all the work was done with hand tools. My mate Jim Sugurue, a New Zealand chap, and I had a five-ton truck with a fourteen-foot tray, and it took two truckloads of pulpwood to fill one NQ railway wagon. Each team was expected to fill three railway trucks per week, which was a fair bit of wood. If there was one spare railway truck remaining at the end of the week, you could fill that, too, which gave you a bit extra. We filled four trucks most weeks and got £25 per truck, which was pretty good money at the time. The length of each piece was 3 ft 9 in and we always stacked them upright on the outside of the truck, then placed the rest down lengthways. The chipper would only take a log to a maximum of eleven inches, so if a log was any wider than this, you would have to split it in four.

This pulpwood traffic was carried by the Beechy between 1955 and 1962, all bound for the Maryvale paper mill in Gippsland, where the hardwood and softwood were mixed together to make paper and cardboard products. The train was kept very busy, and the tonnage out of Beech Forest during these years was possibly as high as it had ever been. It was pretty much the only thing that kept the line going. Mrs. Belcombe was the station mistress at Beech Forest, and she was fantastic to deal with, although she would certainly pull us into line when we got out of hand!



Above: Panoramic photo showing the yard at Beech Forest in 1912. Note the stacks of timber scattered around the yard. Photo: John Thompson collection

Below: 10A at Crowes circa 1931. Photo: K. Tregua from ARHS Victorian Division courtesy Nick Anchen



The timber blokes had a great habit of throwing three pieces of wood in a railway truck to say that it was “ours” to load tomorrow. The pulpwood had to get to Maryvale within six weeks of being cut, or it would start to turn blue, caused by a fungal growth. If this happened, it was no good to them. Sometimes there were not enough railway trucks, and spuds, which were mostly loaded at Beech Forest, Ferguson or Weeaprounah, always had the first call, as they were perishable.

In addition to Beech Forest, pulpwood was also loaded at Ferguson and Weeaprounah, and this traffic kept the line going for years. When the narrow gauge stopped running, the wood went to Colac by road. I loaded pulpwood between 1956 and late 1959, when the contract ran out due to an oversupply, and then I went out on my own.

Ferguson

In the early 1960s I built a little sawmill on my Ferguson property, and I supplied timber to the district. At first, the equipment I possessed extended to an old grey Ferguson tractor, but it was amazing what you could do with a little grey Fergie and a sharp saw. I mostly cut mountain ash and mountain messmate trees, both of which grow in abundance in the Otways. I would select a tree from someone’s property and fell it, then haul the timber around with my 1950 model TD9 Caterpillar dozer.

Alice and I raised six kids, all of whom went to the consolidated school in Lavers Hill. Originally, there were schools at all the little settlements along the ridge, such as Ferguson, Weeaprounah, Wyelangta and so on, but as the population declined they joined them all together and just had schools at Lavers Hill and Beech Forest. The social life on the ridge was good, and we rarely left the district, except maybe at Christmas holidays. There were always the dances and the tennis clubs and football clubs and so on, and it was a good life for the kids. By today’s standards you could say they may have been deprived of some things, but growing up in the country never did them any harm.

MEMORIES OF THE BEECH FOREST LINE – LEO DWYER Riding the Beechy

In the early 1950s, my father, Leo Dwyer Senior, regularly worked on the ‘Beechy’ train from Colac to Beech Forest and Crowes, as the travelling Station Master. On several occasions I accompanied him right through to Crowes, where we would stay overnight before returning the following day. Garratt locomotive G41 was the motive power for most of these trips, although on one occasion it was out of action and they used one of the little NA locos. I would head down to Colac at dawn, just before the train left. We would stop at some of the little stations here and there, and my dad would have to check off all the goods to be loaded and unloaded. When we were on the move, he would sit at the guard’s desk in the van and busily write up all his paperwork. When we arrived at Beech Forest dad would be busy shunting the train before we headed out to Crowes. The people up there were very friendly, country hillbilly types of people.

On the approach to Beech Forest from Colac, you were travelling roughly south, and the line out to Crowes headed west along the ridge, so at one point you could easily hop off the train and walk overland to pick up the train again. I was a keen amateur shooter, so on several occasions I hopped off the train and went rabbit shooting, then met the train as it came out of Beech Forest. The line to Crowes ran along a ridge, and at one point you could actually see the ocean off in the distance. We stopped at most of the little stations, and then we stayed overnight at the little rest hut at Crowes. The men cooked their dinner on a stove, and the engine crews were always very friendly blokes. I remember the bedding being pretty rough, with no sheets, so you just bedded down and covered yourself with old grey blankets. Then the next morning we would head back off and pick up loading – timber and potatoes mainly – at Weeaprounah and some of the other little stops.



G41 departs Beech Forest for Colac with a load of pulpwood on 28 May 1958. Photo: Ray Bruce courtesy Nick Anchen



Loading pulpwood at Beech Forest in 1959. Locomotive G41 stands in the platform road with a 'Kanyana' excursion train, as Bill O'Dowd loads pulpwood timber from his Commer truck into an NQ wagon. 13,000 tons of pulpwood was railed from Beech Forest to Colac in the 1958/9 financial year, along with 3000 tons of potatoes, but this was not enough to save the antiquated 'Beechy' narrow gauge line, which closed on 30 June 1962. Photo: Phil A'Vard courtesy Nick Anchen

On one occasion we hitch-hiked back to Lavers Hill in the evening, and went to the pictures at the local hall. This was where I saw my first *Lassie* movie. On the way back, we hitched a ride with two blokes on a tip truck. They pulled over at Crowes to let us off, and instead of stepping off the back I stepped off the side and fell straight down into a thick clump of blackberries! No real damage was done, but I was quite lucky that night.

On one occasion my little brother came with us on a day trip from Colac to Beech Forest and back. At one of the stops he got out of the van, unseen by my father, and went fossicking about like young boys do. We started off again, and then we noticed he was not with us anymore. I had a look out the back window of the van, and here he was running along the track behind us!

Incidents

My father's most terrifying moment on the Beechy occurred one night as the train was on the downhill towards Colac. The train picked up more and more speed, and was obviously out of control, although with no communications between engine and guard's van, my father could only guess what was happening up front. He wound on the handbrake as hard as he could, which did not help much, and eventually the train slowed to a stop when they reached level ground. The engine crew blamed the grass growing over the track, which caused a loss of traction.

Another incident was again on the outskirts of Colac. One night near Elliminyt, the guard's van became disconnected from the rest of the train, but the train kept going and dad and

the van were stranded out in the middle of nowhere. It was an absolutely pitch-black night, and he set off to walk home. He could see the lights of Colac in front, and he took a short cut across a farmer's paddock when he walked straight into a dam! To make matters worse, he could not climb out, as the bank was so steep and muddy, so he was forced to swim right across the dam and walk out on the shallow side. When he finally made it home, he was freezing cold and speechless!

CROWES LAD PORTER 1921 – FRANK BAWDEN

I relieved at Crowes as a lad porter for two months in 1921. The Beech Forest to Crowes section opened in 1911, so it had only been running for ten years by the time I arrived there. At the time Bill Stephenson was the guard and Dickie Down was the driver. These two men lived in Departmental Residences at Crowes, which was a little place in the middle of nowhere. Dickie Down later went to Ferntree Gully to run the Gembrook line.

We used to run from Crowes to Beech Forest in the morning, then we would pick up the Melbourne passengers and meet the train from Colac at Beech Forest. Then we would head back to Crowes which took us all day to do. When the train arrived back at Lavers Hill, which for all intents and purposes was the end of the line, we still had another two or three miles to Crowes. But if there were no passengers on board the crew would head over to the pub and have a few drinks and a game of billiards. The locomotives never had speed recorders back then, so there was no way they could be discovered.

Now, I was only a lad of 18 and I was staying at a little boarding house about half-a-mile from Lavers Hill so I would

go home. The line was at the bottom of the paddocks below the boarding house, so later on I would be having my tea and hear the train wending its way down to Crowes. Goodness knows how their wives got on!

The “lighter up” was a bloke named Wood, and he was known as ‘Woodsy’. He boarded at the Lavers Hill pub, and he made his way to Crowes very early in the morning each day. He would have to get down there two or three hours before departure to get enough steam up to run the train. Sometimes I would be in bed and hear him heading down to Crowes on his little trolley.

When the train left Crowes to go to Beech Forest, we used to bring a couple of empties. We’d go along and here and there some blokes would be waiting with a load of logs, and stop and they would load them straight into the trucks, which we had put off at the next siding which had a sawmill. This was on a mixed train, passengers and all. It was very “un-departmental”, but it was the only way to get the job done. Then a few days later we’d be picking up the same timber, which by now had been sawn into scantlings, and take it into Beech Forest to go on to Melbourne.

There were some soldier settler farms on the ridge between Beech Forest and Crowes. These were not only offered to Australian soldiers, they were also offered to English officers who had decided to settle in Australia. They did not have a clue what they were in for. They’d be offered 20 acres of land that would not feed a snake. It was remote country. The main road that wound its way through Lavers Hill was just a corduroy track at that time. It was quite alright while I was there, but

I cannot imagine what it must have been like in the winter.

One day we found a young English girl, about 14 or 15, who had decided to run away from home. We found her in one of the little unattended wayside stations, and she was just sitting in the tin shelter shed crying. The guard, Bill Stephenson, was a fatherly sort of man, and we took her into Beech Forest where he handed her over to the station master there. I think she was talked out of running away from home and was returned to her family, but I never heard any more about her, and I often wondered what became of her.

We were always very suspicious of any strangers on board, as we thought they might be SIOs, the dreaded Special Investigation Officers. One day we were heading out from Beech Forest to Crowes, and we had a stranger on board. Bill Stephenson said, ‘Have a look at this joker. I reckon he’s one of those SIOs.’ Apparently there had been a few complaints from passengers claiming that the guard would take their money for a ticket, but not actually issue them a ticket, and instead pocket the money.

We got to Weeaprounah, where there was a great huge log lying on the ground. This bloke hopped off the train and went behind the log, perhaps to answer a call of nature. Dickie Down saw him go behind the log, and quick as a flash Bill Stephenson called out ‘Right Away’, and away we went, with the intent of leaving this joker behind. But the trains were pretty slow, and this chap ran and chased after us, and jumped into the van. Then he gave Bill Stephenson a bit of a roaring up. It turned out he was not an SIO after all, he was just a bloke trying to get to Lavers Hill to visit his mother!



Locomotive G41 at a typically soggy Beech Forest on 28 May 1958. Photo: Ray Bruce courtesy Nick Anchen

Levee Bank Tramways near Tailem Bend, SA

by Les Howard and team

The lower reaches of the Murray River in South Australia flow into Lake Alexandrina before draining into the Southern Ocean near Goolwa. Beginning in the 1880s the riverside swamps north of the lake, between Mannum and Wellington, were subject to reclamation. Farmers and the SA government constructed levee banks along the edge of the main channel in order to utilise the fertile swamp soils for agricultural purposes.

In 1839 John Morphett (later Sir John) acquired land on both sides of the southern-most reach of the River Murray¹ acting as agent for the Secondary Towns Association. He acquired section 1084 on 18 May 1842² and ran sheep³ at Woods Point. The South Australian Governor, Lieutenant General William Jervois, acquired⁴ the large west bank property (now named after him) below Woods Point in 1882 and started reclaiming his swamps.

The Morphett family followed his lead and in 1884⁵ they employed 70 out-of-work Adelaide men, quarrying the adjacent cliff to make the 5- to 6-foot-high river-edge embankment which had a base about 20 feet wide. This was to prevent water from inundating the 650-acre swamp and enabled controlled irrigation via sluice gates and with pumps to remove excess water.⁶ Eventually horse-hauled rail trucks were used to move the fill and raise the height of the bank to 7 feet with a 27-to-30-foot base.⁷ In total they spent about £6000 to complete the works.

Back in 1903, H W Morphett was reported⁹ as intending to reclaim the east bank, and by the time he died in 1938, this had been done and the property, named *Wiltyerong*, was acquired by Arthur H Kilsby.¹⁰



On the night of Friday, 15 March 1946, an intense southerly storm swept through the area with high winds and soaking rain.¹¹ Trees and fences were levelled, sheds unroofed and windmills were blown over. The storm caused a surge in Lake Alexandrina, forcing water back into the Murray River towards Tailem Bend. One of the farmers affected by the floodwaters was Arthur Kilsby, whose farm was located on the eastern side of the river, north of Tailem Bend. He said that the water had been backed up by 3ft 6in at his farm and that it topped over his levee bank.¹² The floodwaters flowed across his farm paddocks and caused considerable damage to both the levee bank – a 90 ft long section was washed away – and the farmland. Keeping¹³ only 100, he sold 4500 sheep¹⁴ at the Murray Bridge market as his flooded paddocks were unusable.

This was not the first time that the river had flooded and broken levee banks. A similar storm occurred¹⁵ on 18 May 1909 and broke the levee at Woods Point.



A train being loaded via chutes below bins filled from the cliff quarry above them. This was possibly during repairs carried out after the 1917 flood.⁸ Photo acquired from the late J C Morphett (courtesy of Chris Andrews) and dated between 1918 and 1923.



A loaded horse-hauled train heads to the embankment for the repairs. Note the Murray River in the background. Photo acquired from the late J C Morphett (courtesy of Chris Andrews) and dated between 1918 and 1923.

Mr Kilsby and his family decided¹⁶ that they would repair the levee and return the farmland to its former glory – not an easy task given the damage that had been caused. He quickly found that local contractors were reluctant to take on the task so he formed his own company with his two sons (Keith and Hartley) and his son-in-law (Ralph Beauchamp). They began by using horses and carts set on rails but quickly realised that it was a job for larger scale machinery.¹⁷

The new company hired equipment from the Engineering and Water Supply Department¹⁸ in Adelaide, consisting of two miles of 2 ft gauge track, 52 trucks and a Malcolm Moore locomotive. The locomotive was E&WS No.4, which left the Mile End Depot on SAR trucks on 28 November 1946. By the 15 October 1947 the locomotive was back at Kent Town Depot according to E&WS advices to researcher Arnold Lockyer. Also used was a Caterpillar 7D9 tractor fitted with a Le Tourneau over-loader with a catcher to guide the fill into the trucks.

While the exact details of the track layout are unknown, Kilsby described to a newspaper reporter what they did:¹⁹

... rebuilding of the embankment ... started in November [1946] ... with the filling-in of the 90ft break. A 60ft barge was laid across the opening and the truck[s] run onto that and the earth tipped over the side. We put 3,000 trucks of filling into the break and after a week we were beginning to see some dirt ... our first ray of hope that we could beat the water. ... they ... put 60,000 trucks of earth into the embankment, which is 1¼ miles long, 36ft wide, [12ft] deep and 6ft [wide] at the top.²⁰ The rail was put down along the top of the embankment and the area built up, so the line was extended and then to build it higher, the process was reversed, and they worked back. ... [at September 1947] with only about a week's more filling to complete, they [went] back for the third time.

The mention of September 1947 and another week's work to be done, ties in nicely with the E&WS advice of October that the loco had been returned. To get enough filling near the rail line for loading the trucks they used the bulldozer to

stockpile it during the night then next day loaded into the trucks of one of the two trains, each consisting of 26 one-ton trucks; it took about 15 minutes to load each train.

The loaded train is driven to a loop, where the other rake of empty trucks has been waiting ... it is brought in to be loaded while the full train is taken to the embankment.

The whole project cost over £30,000 and took about 18 months to complete under the supervision of Jack Loxton, who had done similar work for 30 years for the South Australian E&WS Department. In 1952 the levee survived a similar storm²¹ and the property name was changed to *Kilsby*.

There are known to have been several other tramways near Taillem Bend associated with land reclamation and levee bank construction. These include two tramways associated with the Mypolonga Swamp in the early 1900s – the *Adelaide Chronicle* of 15 July 1911 mentions a 2ft-gauge tramway to move riverside material to a levee bank. By necessity, the bank needed an internal core of different material which was obtained from a distance of some 1¼ miles by a separate tramway.

Another tramway was known to have been used on the Jervois Embankment, on the west bank of the Murray from Taillem Bend. A 1929 photo at the State Library of S.A. (PRG 1258/2/213) shows an internal combustion locomotive similar to *Mabel*. Readers will recall that Fordson-engined *Mabel* was used on the Tauwitchere barrage and on the Torrens River works (LR266 and 267 – available free online). The Jervois Embankment loco has many similarities to *Mabel* but with key differences and would seem to have come from the same builder – possibly the E&WS Department.

All these tramways would make a good project for some dedicated person with a good internet connection and a bit of time for researching.

The preparation of this article has been a collaboration between Les Howard, Chris Andrews, Phil Rickard and the LR Editor.



Above: The E&WS Fordson-engined Malcolm Moore locomotive number 4 with its train at the loading area. Note the Cat 7D9 with the Le Tourneau loader in the background near the locomotive.

Right: A loaded train heads off with another load towards the embankment.

Both photos: John Stanier, *News Limited The Mail*, 20 Sept 1947 from the Arnold Lockyer collection at the National Rail Museum.



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16. Hay, op cit.
17. Hay, op cit.
18. It was not the Railways Department, as stated wrongly in the *Mail* article. Arnold Lockyer ascertained and recorded the facts in his captions for the photos.
19. Hay, op cit.
20. The *Mail* article at this point gives 8 ft as the height, but the flood was quoted in article as 12 ft and a photo caption in the article gives the levee height as 12 ft.
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On the back page of the last edition of *Light Railways* we commemorated the 60th anniversary of the closing of the Colac - Beech Forest - Weeaprounah narrow gauge railway on 30 June 1962. They were hectic days back in 1962, as just one

month later, on 28 July 1962 the section of the Puffing Billy Railway from Belgrave to Menzies Creek was re-opened following a landslide in 1953 and official closure in 1954. We feature some photos taken on the day of the re-opening event.



Above: At Belgrave, just prior to the first train running to Menzies Creek, locomotive 7A is being prepared, surrounded by well-wishers. *Below:* An overall scene of the train waiting for departure from Belgrave narrow-gauge station. Note the Newport Workshops Band performing in the coaling stage. Both photo: John Stephens





Above: The first train has arrived at Menzies Creek and loco 7A has pulled forward prior to running around the train for the return journey.
 Photo: John Thompson

Below: At Menzies Creek, the crew on locomotive 7A awaits the Guard's assistance to complete their run-around for the train's first return journey.
 Photo: John Thompson





Above: After the special re-opening train's return to Belgrave, locomotive 7A is being serviced in 3 Road, while 6A enjoys a rest over the pit in the loco area. Photo: John Thompson

Below: During 7A's service, the former Whitfield postal motor, NK1 and its trailer, stand next to the locomotive shed, which is decorated with bunting for the opening day. Note the seating in the trailer, used to carry passengers on shuttle trips within the Belgrave yard during the day. Photo: John Thompson





Industrial Railway NEWS

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

QUEENSLAND

CAIRNS KURANDA RAIL SERVICES, Cairns

(see LR 278 p.31)

1067 mm gauge

The remains of ex-Emu Bay Railway Walkers B-B DH 1102 (639 of 1970) were put up for sale in July. It has been cannibalised with just the frame and cab remaining.

Joseph Dietz 7/22

MSF SUGAR LTD, South Johnstone Mill

(see LR 286 p.33)

610 mm gauge

Com-Eng 0-6-0DH multi-unit locos 1 (A1821 of 1957) and 10 (A2027 of 1958) along with 6 (C2234 of 1959) and 7 (AD1239 of 1960) were seen working the Silkwood area on various dates between 25 June and 4 August. Interlopers in the Silkwood area on 23 July were Clyde 0-6-0DH multi-unit locos 16 (56-93 of 1956) and 17 (55-57 of 1955). Clyde 0-6-0DH 3 (56-90 of 1956) was seen operating without its multi-unit partner Clyde 0-6-0DH 2 (55-56 of 1955) in mid-August. They had been seen together on 19 July. Around half the spans of the old bridge over the North Johnstone River had been removed by 23 July.

Luke Horniblow 6/22, 7/22; Graeme Daniel 7/22; John Dennis 7/22; John Kirk 8/22; Mark Carter 8/22; Graham Musgrove 8/22; Jasmine Jones 8/22

TULLY SUGAR LTD

(see LR 285 p.35)

610 mm gauge

Walkers B-B DH 3 (643 of 1970) was involved in a collision with a haul out tractor which was foul of the rail corridor on the Pub Branch in Lower Tully on 18 July. Three Com-Eng 0-6-0DH locos were seen on the storage line in mid-July. These were 12 (AD1351 of 1961), 15 (AK3574 of 1964) and probably 17 (AH52100 of 1966) which could not be positively identified. The latest Walkers B-B DH rebuild (586 of 1968) was spotted in the



Top: South Johnstone Mill's Com-Eng 0-6-0DH multi-unit locos 6 (C2234 of 1959) and 7 (AD1239 of 1960) with a short rake of fulls on the No.4 branch in the Silkwood area on 3 August. Photo: John Kirk

Centre: South Johnstone Mill's Com-Eng 0-6-0DH multi-unit locos 6 (C2234 of 1959) and 7 (AD1239 of 1960) pull a rake of fulls out of a siding on the No.4 branch in the Silkwood area on 3 August. Photo: Mark Carter

Above: South Johnstone Mill's EM Baldwin B-B DH 32 Liverpool (10385.1 8.82 of 1982) drops down the back end of Pin Gin Hill as it heads out light loco on the Nerada line on 17 July. Photo: James Chuang



Top: After waiting at Syndicate Junction for two outbound trains to pass by, Walkers B-B DH 8 (606 of 1969) heads off with a rake of fulls for Tully Mill on 12 July. Photo: John Dennis **Centre:** In a quintessentially Queensland scene, Macknade Mill's EM Baldwin B-B DH 20 (7070.4 4.77 of 1977) trundles down the Four Mile Road with a load of cut cane for the mill on 29 July. Photo: John Kirk **Above:** Farleigh Mill's Clyde 0-6-0DH Palms (70-708 of 1970) and EM Baldwin B-B DH Foulden (7220.1 6.77 of 1977) at Pleystowe on 24 July. Photo: James Chuang

loco shed during July. The body work and cab had been fitted and were in grey primer but not the internals and bogies.
Tully Sugar Ltd 7/22; Graeme Daniel 7/22

WILMAR SUGAR (HERBERT) PTY LTD, Herbert River Mills

(see LR 286 p.33)
610 mm gauge
Clyde 0-6-0DH *Lucinda* (65-436 of 1965) returned to service at Victoria Mill in the latter half of July. Its EM Baldwin cab was damaged in a collision with a cane harvester in July 2020 and it now carries the EM Baldwin cab from Clyde 0-6-0DH 11 (65-383 of 1965). The damaged cab is now sitting on 11. *Lucinda* has also received a general refurbishment and a new coat of paint. EM Baldwin 0-6-0DH 14 (6/2490.1 7.68 of 1968) was still working the Victoria Mill sugar train in mid-August although with rising amounts of sugar being produced by the mill, was unable to keep up and assistance was being provided by a Clyde from Macknade Mill on most day shifts. This was usually Clyde 0-6-0DH 12 (65-434 of 1965) with an occasional working by Clyde 0-6-0DH 16 (DHI-1 of 1954). Occasional workings by other Victoria locos in place of 14 have taken place owing to breakdowns and the like. These workings have included EM Baldwin B-B DH *Gowrie* (7135.1 7.77 of 1977) on 3 July and Clyde 0-6-0DH *Perth* (69-682 of 1969) on 6 August. Owing to a locomotive failure, *Perth* was on loan to Macknade Mill from mid-August. The new loop in the 4 Mile was first used in mid-July and appears to be officially named the 3 Mile Loop. Work continued through July and August on the assembly of 150 new 11-tonne bogie bins for Victoria Mill at the Macknade Mill truck shop. At the same time, work has continued on the assembly of the new Wilmar B-B DH loco at the Macknade Mill loco shed. The cab was brought over from Victoria Mill and fitted in mid-August. Anthony Vardanega 7/22; Adrian Watson 7/22; Luke Horniblow 7/22; Mark Carter 7/22; Editor 7/22, 8/22

WILMAR SUGAR (INVICTA) PTY LTD, Invicta Mill, Giru

(see LR 286 p.33)
610 mm gauge
Com-Eng 0-6-0DH locos *Northcote* (AH4091 of 1965) and *Barratta* (AH4098 of 1965) have been transferred to Kalamia Mill in exchange for Com-Eng 0-6-0DH locos *Chiverton* (C1030 of 1958) and *Airdmillan* (AH3068 of 1963) although the former had been working Invicta Mill ballast trains for some time and continues in that duty. *Airdmillan* was seen bringing in fulls on 30 July and 1 August. Com-Eng 0-6-0DH *Haughton* (AH3878 of 1964) has remained at Invicta.
Luke Horniblow 7/22; Mark Carter 8/22

WILMAR SUGAR (KALAMIA) PTY LTD, Kalamia Mill

(see LR 286 p.34)
610 mm gauge
Com-Eng 0-6-0DH *Delta* (FD5094 of 1965) worked the dual gauge line to Town siding on 30

July and waited there while a Pacific National molasses and sugar train from the mill passed through. Com-Eng 0-6-ODH locos *Chiverton* (C1030 of 1958) and *Airdmillan* (AH3068 of 1963) have been transferred to Invicta Mill in exchange for Com-Eng 0-6-ODH locos *Northcote* (AH4091 of 1965) and *Barratta* (AH4098 of 1965). *Barratta* was seen stowing a rake of fulls at Lilliesmere siding on 30 July. On the same day, *Northcote* was seen delivering a rake of empties to Gansford 4 siding. Both of these are RSU remote control locos, possibly the first at Kalamia. Luke Horniblow 7/22

WILMAR SUGAR (PROSERPINE) PTY LTD, Proserpine Mill

(see LR 286 p.34)

610 mm gauge

EM Baldwin B-B DH 10 (9816.1 10.81 of 1981) was seen stabled with the two ex-Herbert district ballast hoppers and the ballast plough beside Cannon Valley Road on 21 June. Nearby were Plasser KMX-12T tamping machine (413 of 1995) and Plasser PBR-201 ballast regulator (243 of 1984). By 6 July, the ballast train was at Mowo siding near Bloomsbury with Clyde 0-6-ODH 5 (65-433 of 1965) as motive power. Walkers B-B DH loco 11 (628 of 1969) rolled over onto its side after hitting a cow in the latter half of July. Not to be outdone, No.5 derailed spectacularly at Conway on 31 July when hauling a rake of fulls and ended up down a low embankment at right angles to the track although remaining upright. Clyde 0-6-ODH 7 (65-442 of 1965) was seen running light loco at Foxdale in the latter half of July. The Tamper VT-JWL tamping

machine (553 of 1975) donated to the Wiscasset, Waterville and Farmington Railway Museum in Maine, USA was in use by 19 July although the lifting and lining functions are not yet working. Matt Wickham 6/22; Luke Horniblow 7/22; Gary West 7/22; John Kokas 7/22; Wiscasset, Waterville and Farmington Railway Museum 7/22; Peter Crossley 7/22; James Chuang 7/22

MACKAY SUGAR LTD, Mackay mills

(see LR 286 p.34)

610 mm gauge

Marian Mill's Clyde 0-6-ODH 14 *Alexandra* (61-235 of 1961) was seen hauling a rake of sixty-six full 15-tonne bins with an estimated weight of 1,200 tonnes on 30 July. Locomotives seen in storage at the North Eton site on 13 July included the following. Com-Eng 0-6-ODM *Richmond* (A1308 of 1955), Com-Eng 0-6-ODH locos *Septimus* (A2128 of 1958), *Carlisle* (A13271 of 1963) or *Pioneer* (A12358 of 1962) and *Barcoo* (FB4383 of 1965), Clyde 0-6-ODH locos *Homebush* (55-58 of 1955), 12 *Nellie* (58-188 of 1958), *Rosella* (64-317 of 1964) and 13 *Devereux* (67-568 of 1967) and EM Baldwin 4wDH 10 (4529.3 11.72 of 1972 rebuilt EM Baldwin 8860.1 8.79 of 1979). There were some other unidentifiable Clydes on site. Steven Jesser 7/22; Brett Geraghty 7/22

WILMAR SUGAR (PLANE CREEK) PTY LTD, Plane Creek Mill, Sarina

(see LR 286 p.36)

610 mm gauge

Walkers B-B DH *Karlo* (632 of 1969) was seen with a load of fulls on the Southern Cane Railway

on 23 July. Since arriving here from rebuild at the Pioneer Mill workshop, it has had a number 2 applied to the nose but apparently no QR number as fitted to other locos of this type here. Steven Jesser 7/22

BUNDABERG SUGAR LTD, Millaquin Mill

(see LR 286 p.36)

610 mm gauge

Owing to the condition of bridges on the Wallaville line, cane from this area is now being road hauled to Millaquin Mill using multi-lift trucks. With just 20,000 tonnes of cane involved, it is not considered worthwhile repairing the bridges. Com-Eng 0-6-ODH *Burnett* (AH2967 of 1963) which used to be the resident loco at the Wallaville Depot is now spare at Bingera. Owing to weight restrictions being placed on bridges on the Bucca line, 26 tonne EM Baldwin B-B DH *Delan* (5800.3 7.75 of 1975) from Bingera and 24 tonne EM Baldwin B-B DH *Vulcan* (5317.1 11.73 of 1973) from Millaquin, have been swapped around. *Delan* was seen at work on the Millaquin system on 9 July and *Vulcan* was working at South Kolan on 2 August. Luke Horniblow 6/22, 7/22; Steven Jesser 7/22; Trevor Duffin 7/22; Stuart Adcock 8/22

MSF SUGAR LTD, Maryborough Mill

(see LR 277 p.35)

1067 mm gauge

This mill which once had an internal rail system closed following the 2020 crushing season. Japanese bio-energy manufacturer Advanced Energies announced on 22 July that it plans to buy this mill as part of an investment in local



Invicta Mill's Walkers B-B DH Minkom (710 of 1973) crosses the Houghton River bridge on 1 August. Clean up operations after a recent derailment can be seen going on in the background. Photo: John Kirk



Mossman Mill's EM Baldwin B-B DH Daintree (7303.1 7.77 of 1977) is surrounded by lush tropical vegetation on the Cassowary Creek bridge on 5 August. Photo: John Kirk

cane-driven bio-fuels. According to Advanced Energies, the mill will be repurposed to produce bio-fuels from cane and ready to crush in 2023. *The Maryborough Sun* 22/7/2022

DOWNER EDI, Maryborough

(see LR 285 p.38)

1067 mm gauge

Walkers B-B DH locos 1104 (641 of 1970) and DH73 *Hugh Boge* (718 of 1974) took an NGR set to Maryborough yard on 12 July then returned light loco to the factory. Both locos plus the Ford hi-rail shunting tractor were seen stabled in the factory yard on 27 July.

Mick Harrip 7/22; Arthur Shale 7/22

PROGRESS RAIL SERVICES, Redbank

(see LR 285 p.38)

1067 mm gauge

On 5 August, Clyde Co-Co DE 1745 (67-559 of 1967) was seen towing an SMU set into the facility yard and on 8 August, Clyde Co-Co DE 1720 (66-502 of 1966) was seen parked somewhere in the yard.

Scott Sashmo 8/22; Mick Harrip 8/22

MARTINUS RAIL PTY LTD, Queensland

1067 mm gauge

In late 2020 and early 2021, four ex-Kiwi Rail DC Class A1A-A1A DE locomotives were imported by Martinus Rail for construction of the 210 km Carmichael Mine railway in north Queensland being developed by Adani Mining Pty Ltd. The locomotives had been built by General Motors Diesel Ltd of London, Ontario, during the 1960s. This was not their first time in Australia as around 1980 they had visited the Clyde factory at Rosewater, South Australia, for rebuilding from DA Class. Prior to their delivery in Brisbane, they had been refurbished and repainted in Martinus livery at the Hutt Workshops in Wellington.

Details are as follows:

- 4041 MR-0101 GM Canada A2118 1966 reb. Clyde 78-870R 1978 ex DA 1507, DC 1555, DC 4041
- 4444 MR-0102 GM Canada A2225 1967 reb. Clyde 79-933R 1979 ex DA 1526, DC 4444
- 4571 MR-0104 GM Canada A2221 1967 reb. Clyde 80-944R 1980 ex DA 1522, DC 4571
- 4692 MR-0103 GM Canada A2056 1964 reb. Clyde 80-961R 1980 ex DA 1480, DA 817, DC 4692

On arrival at the Port of Brisbane, the locomotives received biosecurity clearance and remained there before proceeding in turn to the Martinus workshop in Grindle Road, Rocklea. Here they received final fit out and commissioning before being transported by road to the construction depot at Belyando Crossing. Known dates are as shown:

- 4041 arrived Port of Brisbane 1/2021; arrived Belyando Crossing 6/2021
- 4444 arrived Port of Brisbane 10/2020; arrived Belyando Crossing 3/2021
- 4571 arrived Port of Brisbane late 2020; arrived Rocklea late 2020; arrived Belyando Crossing 3/2021
- 4692 arrived Port of Brisbane late 2020; arrived Rocklea 3/2021; arrived Belyando Crossing 6/2021

On the Carmichael Mine railway, the locomotives were employed hauling track materials and ballast. Following the conclusion of construction which occurred around the end of 2021, 4444 and 4692 were sold to Adani. It seems likely that they are owned by the Adani-owned railway operator, Bowen Rail Co Pty Ltd.

4041 and 4571 were returned to Brisbane by road and were seen in transit on 1 March 2022. However, this coincided with flooding in the Rocklea area and they were taken for temporary storage at East Coast Cranes, Ormeau. It is

believed that they arrived for storage at Rocklea in April. It is reported that Martinus intends to send them back to New Zealand for use in its railway maintenance contracting operations there.

John Browning 7/22

VICTORIA

AGL HYDRO PARTNERSHIP, Bogong Creek

(see LR 274 p.41)

914 mm gauge

The aqueduct maintenance line was walked on 20 April. Motor Rail Simplex 4wDM (7366 of 1939) was still in a shed at the depot and Ruston & Hornsby 4wDM (296070 of 1950) was still in the loop at the five-kilometre point. By June, the latter was being restored to working order for reuse on the line. Several items of rolling stock with a recent coat of bright yellow paint were seen at the depot. These have new builder's plates and some sort of braking system fitted. They look to be old wagons refurbished or new wagons built using parts from old wagons.

Floyd Bromley 4/22; Peter Evans 6/22

OVERSEAS

FIJI SUGAR CORPORATION

(see LR 286 p.36)

610 mm gauge

A Hunslet 6wDH from Lautoka Mill was videoed passing through the Anchorage Beach Resort at Vuda Point with a rake of empties one night in July. It was probably 18 (9273 of 1987) which was ex-Rarawai Mill 21. Present identity at Lautoka is unknown as a renumbering of the mill's locos seems to have taken place within the past couple of years. Cane is being road hauled to Lautoka Mill from as far away as Rakiraki in the north and Sigatoka in the south. Around 100,000 tonnes of cane is expected to be road hauled to Lautoka Mill from traditional Rarawai and Penang Mill areas during this year's crushing season with a lot of this coming from Rakiraki, Ba and Tavua. Rarawai Mill started crushing on 23 June and photos taken at the mill in mid-July showed the following locos to be in use. Clyde 0-6-ODH locos 28 (55-66 of 1955) and 60 (60-219 of 1960), Baguley Drewry 0-6-ODH 9 (3772 of 1983) and an EM Baldwin 4wDH probably 17 (5060.1 9.73 of 1973). All are painted yellow with black hood tops. A pair of unidentifiable Clyde 0-6-ODH Ontrack rebuilds were in the loco shed. A completely grey painted Clyde HG-3R 0-6-ODH and EM Baldwin 0-6-ODH (9442.1 4.81 of 1981) were seen stored nearby. The latter was ex-Lautoka Mill 13 after February 2020. Baguley Drewry 9 was probably ex the closed Penang Mill in 2017. Fowler 0-6-2T (11458 of 1908) is still on display here. Labasa Mill Clyde 0-6-ODH 11 (64-319 of 1964) was sighted on a load of full cane trucks early in July. It has been painted in a new livery of yellow with black hood top and doors, similar to that of Clyde 0-6-ODH 16 *Damo* (65-441 of 1965).

Fiji Sun 24/6/2022; *The Fiji Times* 18/6/2022, 22/6/2022; Kalinga Seneviratne 7/22; Termarcie Taqumu 7/22; YouTube - Sanjai & Salini 7/22; John Browning 7/22



The Light Railways of South Australia

by Peter Lucas

For the Port Milang Historical Railway Museum

Published by Railmac Publications for the South Australian Light Railway Centre at Milang the book has 26 pages A5 portrait format (210 mm x 150 mm) with a colour laminated soft cover. There are many small-format black and white photos and illustrations and all have been reproduced to a high standard. Available from the LRRSA online bookshop - \$10.00 plus postage.

Peter Lucas has written this booklet for the South Australian Light Railway Centre to tell the story of the light railways in that State, their history and the people who operated and used them.

The booklet provides an overview of the many (estimated to be over 700) and varied types of light railways used. It does not purport to be a detailed history of any of the light railways covered in the book – it only gives very brief details of the railways covered, but it does provide some fascinating details and is a good introduction to the subject.

On the inside front cover a map showing the locations of many of these light railways provides a fascinating insight as to how widely dispersed they were. It is interesting to note the number of jetty tramways that were located along the coast line, and also the number of tramways (often mining) located in the more barren areas of the State.

The motive power used on these tramways included manual, horse, camel, steam, petrol, diesel, rope and gravity. The industries covered include agricultural, mining, quarries, munitions, salt collection, brickworks and a wide variety of industrial uses. One of the tramways that fascinated this reviewer was the incline used at the Stonyfell Quarry in 1895 and had double rails, inter-laced, for its full length and a passing loop in the middle. It left one wanting to know more! Another tramway with a very different use was the one at Woomera that carried rockets around the site.

The material in the booklet has all been sourced from the LRRSA SA Group records, and the National Rail Museum in Port Adelaide.

If you are interested in the light railways used in South Australia and want a general overview, this booklet is for you. It would also make an excellent present for a younger (or older!) person who may be showing some interest in light railways.

Reviewed by Richard Warwick

The Light Railways of South Australia



Peter Lucas

for the
Port Milang Historical Railway Museum

The Last Engineer on the North Australia Railway

by Brian N. Smith

Self-published 2021. 196 pp. laminated card covers, 210 x 148mm (A5), 39 small-format photos.

When 28-year-old Brian Smith arrived in Darwin in 1967, on a four-and-a-half year's stint, the NAR was slowly awakening from twenty years' of moribundity. It was still a sleepy, ramshackle operation, akin to a lengthy light railway, with just a few trains a week. Iron ore traffic had started slowly at the end of 1966 and the railway was trying to make the transition to a million-tons-per-annum railway. Brian's job, as resident engineer, was to keep the NAR running. As one would expect, he soon encounters his share of colourful 'Top End' characters – the Greek wharfie, 'Burrundie' Bill, a naked lady, Duke the Stores' Officer, Mister Jim Green, Sue the typiste, the Angry Ant and dozens of others.

Each event is beautifully described, never boring the reader. This book is hard to put down; several times I was literally rolling around in laughter – the case of the oscillating brakevan, relations with Frances Creek Mining, recalcitrant locomotives, the navy's 'borrowed' oil tank, 'Leaning' Lena, a sea burial requiring fire bars, the duplicated van that had to disappear, introducing triple-headers and what happened when Head Office heard that they were running a Fast Goods at 50mph. Of course, not every event was mirthful – a narrow escape from death brings some sobering reflection to one narrative, plus the difficulties Brian and

his young wife encounter in raising a family in Darwin are not overlooked.

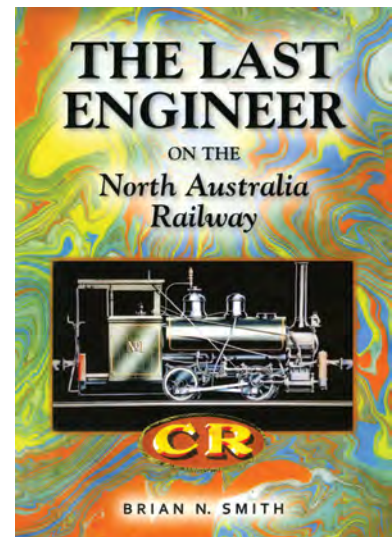
Other books on the NAR have usually been from a railway historians' viewpoint, or maybe a wartime soldier, or even a railfan or locomotive driver. However, this book views matters from the engineering side and is something different. It is a valuable addition to writings about the old NAR. When one is fifteen hundred miles from Port Augusta (CME) and two thousand from Melbourne (H/O), tasked with keeping the show running, one has to think on one's feet. Improvising is often the key plus the occasional unauthorised actions. There is no such thing as working '9 to 5'. Warning – many of the stories are quite funny, even though it is not designed as a collection of hilarious memories. It is well written and very entertaining.

Brian's stint in the NT finished in November 1970 when he was posted back to Port Augusta and the CME's office. The stifling atmosphere there is briefly described. One suspects that the reason he was given trivial things to do and was never consulted by his superiors, even when it came to matters relevant to the NAR, is jealousy. His valuable work on wheel profiling that could have saved large amounts of money was completely ignored. Brian never dwells on it but the fact that his father was the then Commonwealth Railways' commissioner, the well-regarded Keith Smith surely played a part in petty office politics.

All-in-all I found this book a delightful and illuminating read. This is not an engineering book but, rather, a collection of interesting stories from a resourceful engineer, encountering and solving railway problems (and catching the odd barramundi). Anything of an engineering nature is carefully explained in plain language so don't let that deter you.

Definitely Recommended. (Keep an eye on our Sales Dept, or order directly from Brian. e-mail: bnsmith@gmail.com or 56 Drain Road, New Town, SA 5554 or phone: 0439 702 649)

Phil Rickard





LETTERS

Book review – 150 years of Railways in Tasmania (LR 285)

I was pleased to see in *Light Railways* issue 285 June 2022 the review of Lou Rae and Tony Coen's book *150 years of Railways in Tasmania*, which I bought last year. I find it very interesting and helpful as I sort and scan various photos I took when visiting relatives in Tasmania during the mid-1940s and whilst working with HEC in the mid 1950s. The "excellent map of Tasmania showing all the railways and tramways that are covered in the book" is indeed "very clear and helpful". However, there is one place where it disappoints. It shows Tasmania's, and indeed Australia's, southernmost railway at Catamaran but there is no number attached to it and no description of it. All that I could find in the text about this narrow-gauge line were brief statements on pages 65 and 212 that, after the Sandfly tramway was closed and pulled up in early 1922, a locomotive and other items from that tramway were transferred to the Catamaran Coal Company's tramway at Recherche.

In August 2013 a letter of mine and two photos taken in the 1930s of a Krauss locomotive on this line, which I had acquired from my relatives in Hobart, were published



Loading guano on Raine Island, 1890s. Photo: Acquired from the Battye Library in 1987

in issue 232 of *Light Railways*. Checking back in my records I have found various items about the history of this tramway, notably chapter 6 in Lindsay Whitham's book *Railways, Mines, Pubs and People* and other historical research published by the Tasmanian Historical Research Association in 2002. A request in my letter for additional information, including other photos, has not yet received any response!

Tramways on Raine Island

The publication of David Jehan's new book *Tramways, Coconuts and Phosphate - A History of the Tramways of Ocean and Nauru* has reminded me that there was a short period of phosphate mining during the early 1890s on Raine Island, a coral cay on the outer northern Great Barrier Reef. I believe that Dr W Crowther of Hobart had interests in this project and that phosphate rock mined in the centre of the island was transported by a tramway to a jetty on the

western (lee) side of the island. The photo above shows this jetty with a small wagon on it. Does anyone have more information about this tramway and, if so, what motive power was used?

Light railway aspects of Cockatoo Island (LR 284)

David Jehan's article 'Light railway aspects of Cockatoo Island' in *Light Railways* issue 284, April 2022, provides some very interesting information and drawings of the rolling stock constructed there for the NSW PWD's Goondah to Burringuck narrow gauge railway. My grandfather, Charles Simons, a civil engineer with experience in railway construction in both England and NSW was working on the Burringuck Dam project from 25 March 1907 to 13 June 1909. His responsibilities included "Construction of roads, tramways and temporary diversion of river, construction of temporary dams, erection of power plant and



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concreting plant". I note on the last page of the article there is a paragraph 'Locomotive modification' which refers to a NSW PWD 0-6-0T locomotive which had been used on the construction of the Cataract Dam hauling stone and timber. It is speculated that it was overhauled at Cockatoo Island for use on the Burrinjuck dam project. There is no mention as to whether it was standard or narrow gauge. From my research on Charles Simons' career, I understand that the preliminary works before the construction of the dam wall began, involved the use of tramways to move and relocate sand, stone, timber, etc in the river valley upstream of the dam site. Has anyone done any research about these tramways?

Michael Gourlay
The Gap, Queensland
via email

(Editor's Note: Thank you for your interesting letter, Michael. Re **Raine Island** – *Light Railways* No.110 for October 1990, has an article 'Queensland Guano Tramways' by John Browning that includes details of Raine Island's tramway and locomotive. It is available free, online at http://media.lrrsa.org.au/vexa110/Light_Railways_110.pdf. Regarding **Cockatoo Island**, the 0-6-0T locomotive in question (JF 8767/1901) is 2ft-gauge. The tramways used at Burrinjuck are detailed in the book 'The Goondah-Burrinjuck Railway' by John R. Newland, readily available on the second-hand market. Use of the Search function on our society home page www.lrrsa.org.au, will enable readers to find some mentions/photos of tramways at Cataract Dam in previous issues of *Light Railways*, but your editor awaits a definitive history.)

Rail Motors of the Emu Bay Railway (LR 286)

Les Morley's excellent article on Rail Motors of the Emu Bay Railway (LR286) refers on Page 10 to "In 1960 the Mount Lyell purchased ex-TGR rail motor DP19, and re-numbered it DP1, for its mainline use." The photo at top right (presumably) shows Riley DP1 (centre) at Strahan, with a "1" visible to the right-hand side of the worker. This photo was on the front of *Light Railways* 106 (October 1989).

The other two photos show the Daimler-engined car on the Mount Lyell railway in two different colours (Les stated that the Mt Lyell Company had "...one prestige vehicle with a Daimler engine").

All three undated slides were loaned by a workmate (Bob Argall) in the 1980s and copied to prints, then scanned. They were in a group and captioned as indicated in the filenames.

Geoff Thorpe
via email

The Rottneest Express (LR284)

During the years that the horse tramway operated for visiting holiday makers (1908-1924) many WA newspapers seemed to take pleasure in pointing out the island's



Top: Daimler (left) and Riley (centre) railcars at Regatta Point. **Centre:** Daimler railcar in red livery. **Above:** Daimler railcar in green livery at Dubbil Barril. Photos: Bob Argall from the Geoff Thorpe collection

short-comings, often printing visitors' less-than-glowing opinions in their columns. Indeed, for our recent article, Jim Longworth and I were somewhat spoiled for choice in this regard. None-the-less, one had to be on alert for writers with an axe to grind

whilst some others were rather amusing!

One lengthy article, in the Perth *Sunday Times* of 22 February 1914 gives a good view of island camping before the outbreak of the Great War. Readers may find the full story at nla.gov.au/nla.news-article57820369 :



Above: “After two weeks he departs back to the mainland, berating the Government storekeeper for his surly manner, moaning about the price of goods . . .” The horse tram outside the government’s Cash Store, Thompson Bay settlement, awaiting departure for the jetty, a mile distant. Photo: Abraham ‘Izzy’ Orloff, State Library of Western Australia ref Call No. BA1059-610

Right: “Board the Rottnest tram – a battered caravanserai drawn by two careworn horses. Pay Thrippence for a ride of three-quarters of a mile in three-quarters of an hour, and experience the fierce joy of the record-smasher who has attained the summit of his ambition.” Easter 1922. Photo: Abraham ‘Izzy’ Orloff, State Library of Western Australia ref 111485PD snip

DIARY OF A CAMPER Who Spent a fortnight at Rottnest – Some Praise Distributed – and some Censure. By “Dimanchet Empson”. We include some interesting asides hereunder.

It seems Mr Empson was less than impressed by the transport which he was required to use in order to reach his camp bungalow at the northern end of Thompson Bay settlement:

Saturday – Depart for the island by the good ship *Westralian* . . . when the vessel ties up . . . board the Rottnest tram – a battered caravanserai drawn by two careworn horses. Pay Thrippence for a ride of three-quarters of a mile in three-quarters of an hour, and experience the fierce joy of the record-smasher who has attained the summit of his ambition.

Those who haven’t endured the delirious delight of being jarred and jolted on the Rottnest streak-o’-lightning don’t know what speed is. The limestone road winds snakily through pleasant vistas of scrub and salt lake. Arrived at the “terminus” – our camp is some distance further on – two hardy toilers uncouple the horses and unload the luggage: you’ve got

Just published by the LRRSA ...

Wooden Rails & Green Gold

A century of timber and transport along the Yarra Track

By Peter Evans — Published by the LRRSA

Hard cover, 288 pages on art paper, A4 size, 335 photographs, 54 maps and diagrams, glossary, bibliography, references, and index.

The Yarra Track crossed the Great Dividing Range in Victoria, from Healesville to the gold mining town of Woods Point. The first wheeled vehicle to reach Woods Point via the Track arrived on 1 November 1864.

The first chapters of *Wooden Rails & Green Gold* give a detailed history of all the small townships which developed along the Track. There were many of these, including Fernshaw, Marysville, and Matlock. Detailed maps and historic photographs help to bring these places to life.

Subsequent chapters describe the development of the timber industry in the area. A large number of timber tramways were built to bring the timber from the forest to the Yarra Track.

The book includes many exquisite maps. One of these shows the alternative surveys for narrow and broad-gauge extensions of the VR’s Healesville railway to Narbethong. No Narbethong railway was built due to the desire to protect the water catchment. The book explores the conflict which existed between the protectors of the water catchment and the timber and tourist industries.

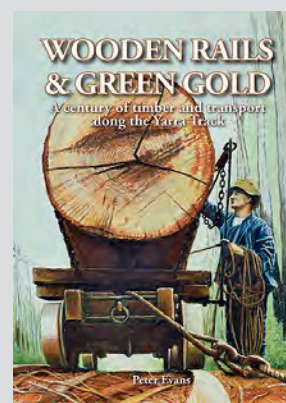
The book is based on 35 years of patient trawling through archives and newspapers, supported by interviews with many of the sawmill residents, and intensive field research at sawmills, mine and tramway sites. It describes what went on in these forests and the difficulties faced by those who lived and worked there.

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to be your own transportation department from terminus to the camp. The day is hot and the luggage heavy, and the spectacle of elderly ladies staggering under the weight of burdens almost too great for them to bear provokes hostile reflections. Somebody wonders audibly why the hardy toilers don't shift the luggage. Came the indignant counter query from one of the hardy toilers, "When's a man goin' to get his dinner?" This being patently unanswerable, the passengers alighted, took up their trunks, and walked.

Our scribe is on Rottnest for a fortnight's holiday and on the whole, he quickly adapts to the island's slower pace of life. For example: Tuesday – go fishing from the rocks. Pay 3s 6d for gear and 6d for bait, and fish solidly for three hours. Catch a rock. Rock catches sinker and hooks. Home again and buy a 3 lb black bream from a smiling Latin for 'vun bob'. Decide it is a lot cheaper than fishing from the rocks. [none-the-less . . .] Wednesday – [try] fishing from the long jetty. Angle with masterly skill for four hours and

successfully hook, gaff and land seven pounds of seaweed.

He also bemoans the lack of a first-class hotel and quickly notes that the 'entire' male population heads to the steamer jetty when the pleasure steamers come in from Perth. The said persons then prop up the steamer's bar for a few hours until departure time. Soon learns the address of the enterprising islander who sells 'bottled colonial' at sixpence a swig! And so life goes on: Tuesday – Mixed bathing and loafing. Wednesday – Loafing and mixed bathing. Thursday – Mixed bathing and loafing.

After two weeks he departs back to the mainland, berating the Government storekeeper for his surly manner, moaning about the price of goods on the island and still pining for a good hotel. Let's hope the steamer's bar was well stocked on the return journey!

Phil Rickard
Ringwood, Vic

Climax locomotive builder's plate

Sometimes you just get lucky!

In the name of research, I had reason to contact a gentleman in Erica recently. He has no strong interest in light railways, but he was my conduit to another person I needed to speak to. In discussing what my project was all about (a book on Erica's sawmills and tramways) he mentioned what he had stumbled across a few years ago.

My contact is involved with the scouts who run a camp at Caringal, near Erica, which many members would know as Tyers Junction. This was the headquarters and base of operations for the Forests Commission of Victoria tramway that operated from Collins Siding from 1927 to 1949.

My acquaintance was undertaking some ground clean-up work near the site of the loco shed using a rotary hoe attached to the rear of his tractor when he heard a loud "clunk". On inspection he discovered he had dug up a builder's plate (No.1694 of 1928) from the FCV Climax locomotive. The plates (there were originally two) were attached to the sides of the smokebox and would have been removed when the locomotive was fitted with a new welded smokebox in December 1944.

Fortunately, curiosity got the better of him and this saw the plate taken home and cleaned up. He found that he quite liked it and, subsequently, mounted it on his wall where it remains to this day!

It was certainly a wonderful outcome that could only have been bettered if it had been me on that rotary hoe! I have walked across that spot countless times in the past! Oh well, there were TWO plates on that locomotive. Might be time to invest in a metal detector!

Mike McCarthy
via email



The Climax builder's plate on display.

Rail Motors of the Emu Bay Railway (LR 286)

I was enthralled by Les Morley's article in the latest LR. His closing comments about the EBR's various converted motor vehicles prompted me to submit a recent photograph (top left, page 41) of the long-disused turntable installed just south of the Melba Flats loading siding. This was used to turn the International Scout station wagon mentioned in the article, and it remains intact many decades after it was last used.

2021 JLN Southern Award

Judging for the 2021 J L N Southern Award proved to be a most difficult task with the judges having to choose between many well researched and written articles. However, there can only be one winner and for 2021 it was 'Luggage Point tramway, Brisbane', by John Browning (LR 276 & 280).

We offer our congratulations to John for his fine effort. An important criterion is how well the context in which the railway worked is described. In this case it was linked to the urban development of Brisbane: the original sewerage system, and the subsequent redevelopment of the land, notably for the airport. John did a superb job in placing the story of the tramway within its broader context.

The judges also commended Jim Longworth for his 'Caldwell-Vale and Purcell Engineering industrial locomotives' (LR 278 & 280). The comprehensive coverage given by Jim to the many customers, each of which could justify its own article, was extremely well done.

We applaud John Browning on taking out the award for 2021 and thank our judges Dr Ruth Kerr, Roderick Smith and David Whiteford, once again, for their efforts in assessing the work of our many contributors.

The award was established through the generosity of well-known Australian railway historian, the late Jack Southern, and was first presented in 2014 to recognise the most outstanding article published during 2013.



John Browning (left) receives the award from LRRSA President, Bill Hanks



Indeed, most of the track remains in place from Melba until about 1.5km out of Zeehan, preserved by the wet climate, lack of development in the area and the line's relative isolation from easy road access. The last train on the section ran in about 1964 but locals tell of a rake of ore wagons that ran away from Melba in the 1980s, downhill much of the way to Zeehan. The wagons had to be hauled back one by one by a track machine, as the condition of the track by then was judged unable to handle the weight of a locomotive. More recently, a berm of old sleepers and ballast was placed across the track a hundred metres north of the turntable to mark the end of what is now the Tasrail network, albeit disused since the Mt Lyell mine closed eight years ago.

A final note, still on the subject of turning rail vehicles: the Zeehan station yard had

disappeared under a housing development by the late 1970s but just outside this area the Wye that was used to turn the Garratt locomotives, and in all probability the rail motors, remains in situ, protected for now by thick brambles, and I have attached a picture of this (above right).

James Shugg
Hobart, Tasmania
via email

Warburton/Powelltown area Post Office history

I am wondering whether any LR readers may be able to help me - I am researching the postal history of the Warburton/Powelltown sawmills, and am particularly intrigued by the Mill called Quongup, which was run by G W Knott until he sold

it in 1928 and it was finally closed in 1938.

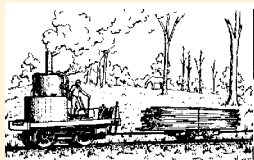
It had a post office - or at least a telephone office - during the period from 1925 onwards, with a short closure between 1931 and 1934.

How did it come by its name, and did it distribute mail locally - I realise the mills often had a small village attached, and the mail came by train, probably from Powelltown, rather than Noojee?

As a matter of interest to readers, I have registered covers (envelopes) from Big Pat's Creek and Richard's Mill in the 1930's. They are quite rare.

If you have any further information on this matter, please respond to the Editor at editor@lrrsa.org.au who will pass it on to me.

Kevin Burt
via email



LRRSA NEWS MEETINGS

LRRSA members on line meetings

The LRRSA will be holding regular members meetings on line via Zoom conferencing on the dates below. Members wishing to "virtually" attend will need to pre-register by responding to an email inviting you to attend or via our website lrrsa.org.au. After registration, details of how to join the meeting will be provided to those that have registered.

October 2022 Members Zoom meeting

Date: Thursday 13 October 2022 at 8.00pm AEDT
Peter Knife will present on BHP's operations in Whyalla and the Middleback Ranges that have involved a wide variety of interesting tramway and railway facilities over the years. Three gauges, steam, petrol, diesel and electric traction, self-acting inclines, hand-pushed skips and the most powerful locomotives in Australia at the time of their introduction have all been featured. Join Peter for an exploration of the many and varied activities

of BHP and its successors in and around Whyalla. Thanks to David Griffiths we will be delving into early images from BHP's collection. We will also sample changes that have taken place in recent decades.

December 2022 members Zoom meeting

Date: Thursday 8 December 2022 at 8.00pm AEDT
Bob Gough will give a presentation on the last adventure of the steam locomotive *Bundy*. The story starts in 1997 at the Brisbane Model Train Show when the late George Hadley, a well-known person who worked at Moreton Central Mill Nambour, was there and approached David Mewes and Bob Gough regarding helping with the Annual Sugar Cane Festival in Nambour. He asked if they would be willing to loan and operate the Bundaberg Foundry locomotive No. 5 to demonstrate cane haulage on an hourly basis from Howard Street yard to the Nambour Mill hauling 45 or 50 6-ton bins of cane. They both agreed and for one week each year from 1997 to 2000 they did the demonstration. The event was recorded in a film titled "Bundy's Last Great Adventure" and Bob will show excerpts and give a description of the annual train running in the main street of Nambour.

BRISBANE: "No Meeting"

At this stage it has been decided to postpone the Brisbane meetings, but this decision is under constant review - members will be notified if the situation changes.

SYDNEY: "Mail Rail"

The London Post Office Railway was a 2 ft gauge, driverless underground railway that was built by the Post Office with assistance from the Underground Electric Railways Company of London to transport mail between sorting offices. Opened in 1927, it operated for 76 years until closed in 2003. A museum within the former railway was opened in 2017. Basil Hancock will present this fascinating operation.

Location: Club Burwood RSL, 96 Shaftesbury Road, Burwood, in the 'Private Room', Brasserie Restaurant. Free parking in RSL car park. Only 10 minutes easy walk from Burwood railway station. Please contact Ross (0415995304) or David (0400347127) if you need to be signed in upon arrival.

Date: Wednesday 26 October 2022 at 7:30pm

MELBOURNE: "No meeting"

Online meetings via Zoom will be hosted from Melbourne and will feature presenters from far and wide. Refer meeting dates above.

ADELAIDE: "Bi monthly meeting"

The SA group meets every second month on the first Thursday of every even month to discuss matters of light railway interest. As accommodation is limited, interested persons should contact Les Howard at sa_group@lrrsa.org.au for details if you have not previously been to a meeting.

Location: 1 Kindergarten Drive, Hawthorndene
Date: Thursday 6 October 2022 at 7.30 pm



Heritage & Tourist NEWS

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

QUEENSLAND

QUEENSLAND PIONEER STEAM RAILWAY, Swanbank

1067 mm gauge

On 3 July, the Queensland Pioneer Steam Railway took delivery of *William Brown*, ex-Pioneer Sugar Mill *McDesme*, a 1954 Clyde Plantation Locomotive, which was enabled by a \$2650 grant from the Ipswich City Council.

Abandoned Railways of Australia Facebook post, 6 August 2022 by Teresa Harding, Mayor of Ipswich City Council

MARY VALLEY RATTLER, Gympie

1067 mm gauge

Thanks to the quick-thinking members of the Gympie community on alerting emergency services who responded quickly, a fire which could have caused serious damage to rolling stock and infrastructure, was contained by firefighters. Once onsite they, with the assistance of Mary Valley Rattler staff and volunteers, were able to quickly contain the blaze. There was no damage to the current operating fleet and the Railway will be operating all services as per the schedule.

Light Railways of Australia Facebook post by Ray Smith, July 27

DURUNDUR RAILWAY, Woodford

610 mm gauge

Work has now started on erecting the workshop annex. This is expected to take a few weeks but once completed will allow workers to reorganise the workshop as well as relocate/add much needed machinery. It is very important that the railway sets itself up to be able to do as much as possible in-house as, apart from ever increasing costs, there are getting to be fewer and fewer external companies which can do the sort of specialist work needed.

As reported in the last edition, the railway is providing the location for training for the Certificate II in Rail Infrastructure course. Following experience



Top: Peckett 1069 of 1905, Mt Morgan Mines No.4 and later Mt Isa Mines No.1 is looking in splendid condition at Herberton on 17 July 2022. Carrying the named "Donald R Walker" and a numberplate "HRM No.1" It is almost ready to be returned to service, but before it and the well restored AHHR passenger car are able to run on the railway a bridge needs to be repaired or strengthened. Sister locomotive 1174 of 1908, Mt Morgan No.5, is also displayed at Herberton, in an unrestored condition. Photo: John Dennis

Above: The "Tinlander" seen here at the Village Platform at the Historic Village on 17 July 2022. Photo: John Dennis

with the first group of students undertaking the Certificate course, the railway was better prepared for the later groups of trainees. Rather than the small clusters of sleepers workers were used to, it was apparent that students were more productive replacing all timber sleepers in a section. In total about 86 metres of track has been completed by the students.

To put this into some context of what it means for the railway, in January 2022, 54.1% of the mainline sleepers were steel or concrete. After three practical classes, 73.2% of these sleepers are now steel or concrete. This is great benefit, but it requires significant commitment from ANGRMS to have at least two people on site for the whole period, preferably including one who can drive the train, if needed.

The railway will be having its 50th Anniversary Open Day on 2 October.

Durundur Railway Bulletin 43: 376 July/August 2022

ARCHER PARK RAIL MUSEUM, Rockhampton

1067 mm gauge

The 30 Year Anniversary event is to be held on 20 October 2022 and preparations continue. An invitation/flyer for the event and an invitation list, including politicians, councillors, sponsors and supporters, as well as members who receive their newsletter by post, has been completed. The Museum President did a radio interview with ABC Capricornia to talk about trying to reach past members and it is also being shared on Facebook. Unfortunately, there have



Top: The Atherton-Herberton Historic Railway offer rides on the “Tinlander”, consisting of a pair of section cars top-and-tailing two trolleys converted with seating for passengers. When the train is full, passengers sit on the seats in front of the driver and observer, facing backwards. The “Tinlander” is seen here departing Herberton on 17 July 22. Photo: John Dennis

Above: The “Tinlander” approaching the road overbridge on 17 July 2022, with the Herberton home signal cleared in the background. Photo: John Dennis

only been a few replies to the search for past members.

The Track Work Training Group, OSCA, continues to use the museum facility to do the hands-on training for their trainees. It provides a small income each month and they also assist with putting a couple of sleepers in every now and then.

Tram Tracks: Volume 16 Number 3, 2 August 2022

DREAMWORLD, Gold Coast

610 mm gauge

On 7 July Dreamworld Australia CEO Greg Yong officially unveiled the upgraded attraction to media. The attraction closed in 2020 to carry out upgrade works. As part of the upgrade, Dreamworld has purchased a set of three new carriages with a new automated PA system, lighting and cameras.

The track has been heavily modified and visitors now head in a clockwise loop around the park. Unlike previously where the train ran to a timetable, the train now runs continuously every day, with a train departing the stations every 20 minutes or so.

Dreamworld’s Golden Years – Past, Present, Future Facebook post, July 7

With a tight deadline in place, the contractor Severn Lamb needed to have everything completed for the grand opening. As Dreamworld continued with its own, station, track and loco refurbishments, Severn Lamb completed the manufacture and delivery of three heritage style carriages in just three months. The new carriages are in keeping with the nostalgic look and feel associated with the Dreamworld Express, but underneath they consist of the company’s latest chassis technology, running gear and safety features, with remote locking carriage doors, a modern PA and lighting systems alongside CCTV. The carriages also boast an increase in passenger capacity over the original units, with up to 36 passengers per carriage with the improved inclusion of wheelchair accessibility.

Severn Lamb Facebook post, August 4

Thanks to John Browning for notification of these posts.

NEW SOUTH WALES

ZIG ZAG RAILWAY, Clarence

1067 mm gauge

Local news reporting states that after surviving two bushfires, bouts of mindless vandalism and rule changes, the Zig Zag Railway will open for business in late 2022.

Noel Rowsell in *Nepean News* on line, July 8, 2022

VICTORIA

PUFFING BILLY RAILWAY, Belgrave

762 mm gauge

Puffing Billy Railway recently celebrated 60 years of train running since the line was re-opened on July 28, 1962. In a joint event, organised by the Puffing Billy Preservation Society and the Emerald Tourist Railway Board, a train ran from

Belgrave to Menzies Creek with Society and Board members aboard. Upon arrival at Menzies Creek, passengers decamped to the Museum for entertainment, food, drinks and celebratory speeches. Attendance was very good with more than 100 people participating. After the event, passengers caught the return train to Belgrave. Andrew Webster, in attendance, 28 July 2022

Locomotive 7A hauled the special to Menzies Creek to mark 60 years since the historic running of the first train. However, the locomotive cosmetically was not in good shape and was, and still is, due for heavy workshop attention, so the Wednesday Night Workshops Volunteer Group under the guidance of Robert Reed and Andrew Fairweather, decided to spruce the locomotive up ready for the special train.

The locomotive had run the previous day to clean the cobwebs out after a month and a half of storage as a standby locomotive. Once this run was completed it was moved into the workshops to get some cosmetics done to it to make it look as close as possible as it did on that first trip 60 years ago. For this, workers fitted a large electric headlight to it, the first time it has had one since late 2004, transverse jacks, rounded number plates like the 1960s version and a full set of marker lamps. The Menzies Creek Museum loaned the number plates and headlamp for the occasion. Workers also repainted the smoke box and polished as much of the brass work as possible. In five hours, they turned a pretty sad looking loco into one that looked splendid, which was a good way to salute the men and women who got Puffing Billy going again in 1962.

Puffing Billy Volunteers Workshop Group Facebook post, 28 July 2022

CARIBBEAN GARDENS RAILWAY, Scoresby
610mm gauge

The railway is still being dismantled. When viewed on 22 August only some 300 metres of the original 3.13 kilometres was still in situ though most dogspikes and fishplates have been removed. In the north-west corner this has allowed seemingly curved rails to spring part-way back to straight! Much work seems to be ongoing at the south-west corner with heavy machinery on-site. Track lifting on the rest of the site appears to have been rather desultory over the last two months. Rails are still embedded in the entrance roadway from Stud Road. Central station and the carriage shed still stand together with the various level crossing signalling infrastructure. The market is again operating seven days a week with a huge range of stalls but there are no rides or other activities. See <https://2-0.com.au/> Richard Warwick and Phil Rickard; July, August 2022

WALHALLA GOLDFIELDS RAILWAY, Walhalla
762 mm gauge

On a visit to this spectacular railway in mid-August volunteers on site reported that the former Queensland Government Railways DH class diesel hydraulic Walkers-built locomotive that has sat on isolated track in Walhalla yard for



Top: The former carriage and loco shed at the Caribbean Gardens railway showing the track removal currently underway. Photo: Phil Rickard

Centre and above: Walhalla Goldfields Railway Fowler locomotive hauls its train across Stringers Creek (centre) and the Thompson River (above) on 13 August 2022. Both photos: James Shugg



Top: Fowler 0-6-0T locomotive number 5 at the Alexandra Timber Tramway on 12 June 2022. Photo: Peter Evans

Centre: Malcolm Moore V8 petrol locomotive at Alexandra on 14 August. Photo: James Shugg

Above: Malcolm Moore diesel locomotive at the Kerrisdale Mountain Railway On 14 August 2022. Photo: James Shugg

some years now would be lifted from its 1067 mm gauge bogies later that month in preparation for regauging. The ex Emu Bay Railway 10 class (also Walkers-built and heavily modified at Walhalla) needed attention in the workshops so services were being operated by the Fowler diesel mechanical locomotive. The crew noted that the ride in the rigid 0-6-0 Fowler was much rougher and noisier than in the B-B 10 class. James Shugg, August 2022

ALEXANDRA TIMBER TRAMWAY, Alexandra 610 mm gauge

The Fowler steam locomotive's annual boiler inspection reportedly went well, and as this loco was still being reassembled, it gave one of the two beautifully restored Kelly & Lewis diesels (b/n 5957 of 1936) the opportunity to operate trains on the running day on 14 August. Later in the day one of the Malcolm Moore V8 petrol locos, still fitted with snow plough, also operated services. This welcoming little volunteer-run railway is housed at the former Victorian Railways Alexandra station which was also the starting point for the Rubicon tramway on which the two Kelly and Lewis diesels operated until the mid 1940s. It features an impressive collection of narrow-gauge locomotives from Australia's industrial past, about a dozen of which are in operational condition. James Shugg, August 2022

KERRISDALE MOUNTAIN RAILWAY, Kerrisdale

610 mm gauge

Just 30 minutes' drive down the road from the ATT in Alexandra, this steep zig zag adhesion railway was also visited on 14 August. The full two carriage train was pushed up the hill by the Malcolm Moore diesel loco on this occasion, which suited your respondent who is a fan of these sturdy little locomotives, but services are sometimes run by a geared 0-4-0T steam locomotive recently built at the railway. This is a seriously impressive family-run operation, and the workshops and machinery displays are immaculately turned out. James Shugg, August 2022

TASMANIA

WEE GEORGIE WOOD, Tullah

610 mm gauge

The 2022/23 operating season opens on 1 October and the plan is to run trains on the first and last weekends of the month until the end of April (with the exception of the Christmas weekend). Steam trains run from 10.00 am but train buffs are welcome to turn up from 7.00 am to help with lighting up and steaming the Fowler locomotive. Since April, working bees have replaced many sleepers along the main running line and tightened up the gauge on the balloon loops. The Nicola Romeo petrol loco has had worn driveline components replaced (amazingly, available off the shelf from a northwest coast engineering firm), and carriage bogies have been inspected. James Shugg, August 2022

REDWATER CREEK RAILWAY, Sheffield

610 mm gauge

The Krauss locomotive continued to operate trains on the first weekend of the month through the winter averaging about 50 passengers and 6-8 return journeys on operating days. Also, a midwinter festival was held on 25 June which saw 16 busy return trips including several night runs. The operating arrangement was for the Malcolm Moore diesel locomotive to haul the Krauss and three carriages on the outward journey, before detaching to allow the Krauss to haul the train back to Sheffield. This eliminated the need to run around the train at each end of the line.

Plans are underway for Steamfest 2023 on the long weekend of 11 to 13 March, after the 2022 event was cancelled due to Covid. Arrangements have yet to be finalised, but it is hoped that *Wee Georgie Wood* and carriages will travel from Tullah to Sheffield so that two trains can run simultaneously throughout the weekend, crossing at the Dulverton station loop. James Shugg, August 2022

IDA BAY RAILWAY, Lune River

610 mm gauge

After more than two years of negotiation, a workable five-year, renewable licence to allow the Ida Bay Railway Preservation Society to commence the restoration of the government-owned railway to safety accredited operation was signed by Society officials in July. At the time of writing, the Society was awaiting the Minister's delegate to countersign the licence. This will initially give the Society exclusive access to the Ida Bay workshops precinct and the

railway west of the highway road crossing. Once the Society has gained the necessary rail safety accreditation and demonstrated its capabilities, the licence will be extended to cover the rest of the railway. There is a lot of work to do but it is hoped that by late 2023 works trains will be running on at least the first couple of km of railway towards the early settlers' cemetery. James Shugg, August 2022

SOUTH AUSTRALIA

FARINA COMPLEX, Farina

1067 and 1435 mm gauges

The Farina Creek Railway re-development has had its first passengers. Volunteers in this group have been very busy in the past two weeks, preparing the ground, laying ballast, sleepers and finally some track. This is the first narrow gauge track laid in 67 years, i.e. before the Commonwealth Railways built the standard gauge railway that commenced service in 1956. This is just the start of what will be a fantastic display project in the next few seasons, given the further support of all the many volunteers and supporters. Although the last day of operations was Monday 25 July, the site will be open all year round.

Farina Restoration Group Inc. Facebook post, July 2022 on the *South Australian Railway Enthusiasts* Facebook page.

BEACHPORT RAILWAY, Beachport

1067 mm gauge

A letter was recently sent to the H and T section Editor from John Lawrence of Benalla in Victoria: While on holiday touring in SA, I came across

some relics of the jetty tramway at Beachport, SA. There are four picnic seats constructed from the flat top trolleys which are well preserved. These would have been used for the transport of goods and fish etc. to shore from sea going vessels. The four trolleys are each mounted on a short section of rail and sleepers with side seats attached. The gauge is 1067 mm, the rail is 60lb/yd. The wheel diameter is 440 mm and the bearings are SKF. The trolley dimensions are length 2100 mm and width 1320 mm. Also, in the small town is a remnant water crane from the railway marked SAR, and dated on a mounted plaque with 1878-1966, presumably when the railway from Millicent was opened and closed.

COBDOGLA IRRIGATION AND STEAM MUSEUM, Cobdogla

610 mm gauge

The ABC recently interviewed Douglas Fieldhouse about the future of the Cobdogla Irrigation and Steam Museum. To see the item Google "cobdogla steam museum stalwart abc" and you will find it. Note that there is a second link inside the article about the future funding issue. Les Howard email 12/7/2022.

The railway track is currently being upgraded and a number of prefabricated track panels have been made in preparation for replacing about 100 metres of track which was originally laid using short sections of rail.

The injectors and oil firing system on the Bagnall locomotive have been overhauled. The operators were experiencing priming issues, but this was traced to build up of mud in the overhead tank water supply. Once the tank was cleaned out



Composite Krauss b/n 5682/5800 of 1906/1907 was rebuilt from the remains of two locomotives and commenced operation in preservation 50 years ago in 1972. It is seen here heading back to Sheffield in the late afternoon of August 7, with Mt Roland in the background. Photo: James Shugg



Bagnall locomotive being prepared for the July open day at the Cobdogla Irrigation and Steam Museum. Note that the sand boxes have been replaced on the engine. They were removed when the loco was repainted several years ago. Photo: Denis Wasley

and refilled with fresh river water, the priming problem disappeared.

A major clean up of the storage yard has been carried out, removing weeds and sorting out scrap from useful items. The useful items include some 40 lb rail, 60 lb points sets, and broad gauge sleepers waiting to be processed into 2 foot gauge ones, and various other items. Elsewhere in the museum, SA Water has let a contract for the removal of the old tar pit where the tar residue from the Humphrey Pump Gas Producers had been stored.

A number of new displays and another railway carriage were built or installed during and since the lockdown, and another vintage tractor was restored. Denis Wasley, August 2022

MILANG RAILWAY MUSEUM, Milang

610 and 1600 mm gauges

A new locomotive is coming to the museum. Recently the museum committee accepted the offer of the long term loan of a two foot gauge Simplex diesel locomotive, Simplex works number 21575, built in Bedford, UK, in 1956 and delivered to the Pleystowe sugar mill, Queensland. It has a 28 hp Dorman diesel engine with a chain drive. In 2000 it was sold to a private railway near Noosa and then to its current owner late last year. It is now being restored offsite and will be fitted with the necessary safety controls to allow its use on the train rides at Milang.

The Lakes Railway News June 2022

WESTERN AUSTRALIA

BENNETT BROOK RAILWAY, Whiteman Park

610 mm gauge

Progress has slowed on a couple of projects due to the usual maintenance requirements and staff shortages. BT1 has recently had some worn bearings needing replacement on the fireman's side. *Rosalie* has sporadically been running with only minor problems and just requires a final programming of the gearbox to reduce the engine braking and downshifting when coasting. The O&K Mallet is waiting for the heritage lottery grant application to be finished and reviewed before submission. *Yellow Rose* has been on occasional display at Revolutions to coincide with a talk about Whiteman Brickworks. *Ashley* has finally been scheduled for its fuel injection pump overhaul with the air compressor and some body work receiving attention. The injection pump has had its seals go hard from the excess heat in the engine bay. *Maylands* has been running midweek when the weather allows and in due course it will be receiving a re-paint. On the Atlantic Planet, the failed drive flange has now been replaced and this loco is running as BT1's backup. The Dorman Planet is waiting on the rear axle to be installed under the locomotive to enable it to be brought inside the locomotive shed. The locomotive department unfortunately does not have the equipment currently to do this themselves. The 0-6-2T Perry is slowly getting Jones couplings made and fitted using ex LA ballast hopper coupling parts. The Gemco has funding secured for a drivetrain upgrade and this is scheduled after Ng15 123 is running. Ng15 123 is nearly ready for its hydraulic boiler test.

The Bennett Brooklet – August / September 2022

TRAMWAYS, COCONUTS AND PHOSPHATE

A HISTORY OF THE TRAMWAYS OF
OCEAN ISLAND AND NAURU



DAVID JEHAN



Light Railway Research Society of Australia Inc.
A14384U ABN 27 859 154 705

Recently published by the LRRSA ...

Tramways, Coconuts and Phosphate

A History of the Tramways of Ocean Island and Nauru

By David Jehan — Published by the LRRSA

Soft cover, 144 pages, A4 size, 195 photographs, 16 maps plans and diagrams, bibliography, references, and index.

Nauru and Ocean Island are 265 km apart and about 3000 km from Brisbane. For most of the twentieth century the major activity on both islands was phosphate mining, for the manufacture of superphosphate.

On both islands tramways were used between the mines and the jetties. Over 25 steam locomotives of 2 ft and 3 ft gauge were used, as well as two electric, five petrol, and seven diesel-hydraulic locomotives. This book describes the tramways in detail. It also explores the discovery of the phosphate, the establishment of the industry, its management, and the living and working conditions of the many people who worked there.

The recommended retail price is **\$33.00** (\$24.75 for LRRSA members) plus postage and packing of \$14.30 anywhere within Australia.

More details, preview video, and online orders: <https://shop.lrrsa.org.au/>

Or by Mail: LRRSA Sales, P.O. Box 21, Surrey Hills, Vic 3127.

One of the last users of industrial steam locomotives in Australia was the Commonwealth Portland Cement Company at Portland, NSW. The Company operated both 3 ft and standard-gauge railways around the works and associated mines. By the 1970s the system was reduced to the short, steeply graded, connection to the Portland railway station. On 22 May 1979 the Company's last-acquired steam locomotive, former NSW Government Railways 2-6-2ST number 2605 (Dübs & Co. B/N 2794 of 1892), was photographed leaving Portland station for the works. After rail operations at the cement works ceased in late 1982, this engine was acquired by the Lithgow State Mine Heritage Park and Railway and has been restored by the Lithgow State Mine Railway. Photo: Colin Harvey

