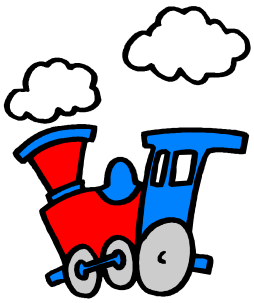
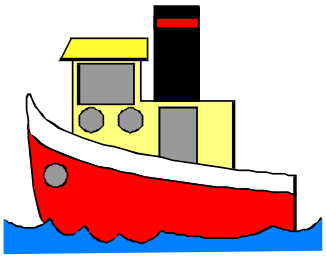


Wheels and Floats



Newsletter October 2019

TAURANGA MODEL MARINE AND ENGINEERING CLUB INC.

The Secretary
PO Box 15589
Tauranga 3112

Palmerville Station Phone 578 7293

Miniature Railway Memorial Park
Open to Public, weather permitting
Sundays 10am to 3pm approximately

Website: www.tmmec.org.nz
Facebook: Memorial Park Railway Tauranga

MEETINGS
General Members Meeting every first Tuesday 7pm.
Committee Meeting every second Thursday at 7pm.
Maintenance Tuesday mornings from 9am.
Engineering discussions Tuesday evenings 7.30pm.

COMMITTEE

President:	Russell Prout	548 2881
Vice President:		
Club Captain	Bruce McKerras	577 0134
Secretary:	Jason Flannery	572 1165
Treasurer:	Owen Bennett	544 9807
Committee:	Ash Thomas, Max Donnelly, Joanne Knights, Bruce Harvey Brian Fitzpatrick.	
Boiler Committee:	Peter Jones, Bruce McKerras, John Heald.	
Safety Committee:	Chris Pattison (Chair), Peter Jones, Warren Karlsson.	
Editor:	Roy Robinson royrobkk@gmail.com	07 5491182

CONVENERS

Workshop:	John Nicol
Track :	Bruce Harvey, John Stent.
Librarian:	Chris Pattison
Rolling Stock:	Bruce Harvey
Website:	Murray de Lues

OPERATORS 2019

20 October	B Fitzpatrick
26 October	TBA
27 October	B Harvey
3 November	P Jones
9 November	W Karlsson
10 November	B Mckerras
17 November	N Bush
24 November	M de Lues
1 December	B Fitzpatrick
8 December	B Harvey
15 December	P Jones
22 December	W Karlsson
29 December	B McKerras
5 January	M DeLues
12 January	B Fitzpatrick
19 January	J Flannery

President's Report

Welcome to Spring and as the weather is now improving some of the outside maintenance works have been undertaken. Jason and Ashley T have completed the X-int insert and this is now installed and operating very well, thanks guys.

A new pneumatic operating mechanism was also trialled on one of the points on the steaming bay exit. This system utilizes a single actuator and springs on all moving parts (very similar to the original). The main improvement is that all moving parts are now held against their respective rails and any wear in the joints is less likely to affect the operation. This has proved to be very

successful and will now be fitted to more of the older style points, one at a time.

The new water filling hoses (raw and treated) are now set up with a pressure pump installed to increase the flow of treated water. The connections at the station are quick coupled for easy removal and are reverse coupled to ensure the correct hose fits the correct service. Some work is also progressing on receptacles for the bowser hand pieces. Thanks to Warren B, Bruce H and their support team for digging in the new feed hoses and connecting everything up.

More working bee's will be advised by Jason as the projects come to hand.

Peter J and Brian M have been busy lining the walls and painting in the toilet area, well done.

Warren K, having returned from a trip to Europe, was deeply immersed in a major overhaul of the Silver Fern electric loco and has a considerable task ahead of him. Thanks to Peter D we are progressing toward having detailed CAD drawings for the bogies and the required replacement parts will be sourced once these drawings are complete.

I dropped in to see Phil A in search of some BA bolts to complete my Stuart 'Half Beam' Engine and I was completely blown away by a project he is currently working on. A little hint...the winch gear is about 250mm in diameter and it is steam powered. We look forward to seeing some of the progress on club nights. I did succeed with my BA bolts too. Thanks Phil for sharing your time.
Max D has recently changed schools and one of his first projects was to complete and run an electric vehicle in the annual challenge held at the Hamilton go-cart track. Max's vehicle completed the 1 hour continuous circuit run and would have continued for a few more laps too. Easy to see how some previous go-cart experience has contributed to this build. Well done Max and we look forward to the next one. Bruce M and I dropped in on Max during the vehicle run and I think we were both impressed at the variation and performance of these vehicles. Having loaded Max's EV onto the trailer we took Max to the HME track for a night run. An excellent night and well hosted by Hamilton. Thanks to you all.

William C Daldy Steam Tug sailing on 2nd November. This is coming up fast and if you want to go, then please **book online** before 22nd Oct. The sailing will be cancelled if there is insufficient passengers. Cost is $45 pp for ME members which is considerably cheaper that the front up price of $70. This is a golden opportunity to see this traditional tug in it's working clothes.

- TMMEC Open Weekend will be held from November 9-10. We have the Norm Decke trophy and Ron Salisbury trophy for Senior and Junior projects so get your busy hat on and bring the completed projects along. This is also an opportunity to show off your toys so if possible bring these along too. Guests welcome throughout the weekend.

Have a great October

Your President Russell Prout

An elderly couple were driving in the South Island. The woman was driving when she was pulled over by a Highway Patrol.

The Officer said, “Ma’am, did you know you were speeding?”

The woman, hard of hearing, turned to her husband and asks, What did he say?”

The old man yells, “He says you were speeding!”

The Officer says, “May I see your license?”

The woman turned to her husband again and asks, What did he say?”

The old man yells, “He wants to see your drivers license!”

The woman gave the Officer her license.

The Officer says, ”I see you come from Arkansas. I spent some time there once and went on a blind date with the ugliest woman I have ever seen.”

The woman turned to her husband and again asked, “What did he say?”

The old man yells, “He said he knows you!!!!!!!!!!!”

I will be running a series of articles from "The Treasury" at Thames over the next while.

The Treasury has generously allowed me to reproduce some of their articles for our mag.

BILLYGOAT TRAMWAY

by David Wilton

Introduction

The Billygoat tramway was an important part of the infrastructure established to log kauri timber in the Atuatumoe (Billygoat) stream catchment, a tributary of the Kauaeranga River. The background and history of kauri logging in the Kauaeranga Valley area can be found in the separate Parawai Booms article on this web site.

Figure 4: View of Billygoat Camp, showing hauler shed (chimney with smoke, near centre) loading ramp and loaded bogeys. The other source of smoke towards the left is probably the cookhouse.
Click to enlarge the photograph.

The tramway terminus (known as Billygoat Landing) can be reached by driving to the car park at the end of Kauaeranga Valley Rd. Walk approx 500m to the suspension bridge, cross the Kauaeranga river and proceed approx 100m east on the track towards Pinnacles Hut. A side track (approx 50m long) is signposted to Billygoat Landing. The landing is immediately adjacent to a small knoll, which the track climbs to afford views of the Billygoat Falls. From the landing, it is possible to cross Atuatumoe Stream and follow the tramway route uphill to where it joins the main DoC track (earthworks, such as cuttings, and timber remains of the tramway are clearly visible).

To access the railhead and middle reaches of the tramway, park approx 1km short of the road end, where a DoC track is well signposted to Billygoat Falls and Tarawaere Dam. Cross the main river by fording or via the

suspension bridge and follow the track towards Billygoat Falls. After approx 40 mins climbing, the track reaches the crest of a ridge, which was the route of the tramway. From here on, cuttings associated with the tramway can be seen and there are two short sections of rail, which have been restored. Where the incline levels out at the top of the ridge, an interpretation panel is located at the site of the steam winch. Further on, the remains of trestle bridges can be seen (the so-called long trestle is signposted). The railhead, and site of Billygoat Camp, is well off the track and difficult to find, due to thick scrub and regenerating bush.

Figure 5: View of some Billygoat Camp buildings.The temporary nature is apparent, which makes remnants of these camps so hard to find 80+ years on.
Click to enlarge the photograph.

All parts of the Billygoat tramway and other supporting infrastructure are on Conservation land and access is unrestricted. However, the terrain is steep and rugged and normal precautions relating to back-country tramping should be observed.

GPS Waypoints and Location Maps for The Billygoat Tramway.

History

Logging in the Billygoat basin, above the falls, commenced in the 1880s, when the Stone Bros. had the contract to log the Kauaeranga area. The subcontractor for the Billygoat catchment was Sam Webb (after whom Webb's Creek was named) who built three dams in the headwaters of the Atuatumoe Stream. The initial extraction plan was to build a dam at the top of the 200m-high Billygoat Falls and drive logs over the falls to the Kauaeranga River below. However, the long free-fall meant that most of the logs were smashed on landing, and another method had to be devised. This involved using the dam at the top of the falls as a holding dam and building a short section of wooden-rail tramway, bypassing the falls. From the end of this tramway, logs were fed into a log chute that took them down to the main Kauaeranga River (see Fig. 1). However, the length of the chute meant that logs were travelling so fast on arrival at the bottom, many got stuck in the mud and were difficult to extricate.

By the 1920s, the Kauri Timber Company (KTC) had taken over the Kauaeranga lease, and in 1921 conceived the idea of a tram line, to carry logs from the head of the Billygoat, all the way down to the Kauaeranga. The steep lower section was built by contractors Tony Voykovich and Frank Kumerich and had a maximum gradient of 1:2.7.

Figure 6: Fordson rail tractor used on the near-flat upper section of the Billygoat tramway (here being used to collect firewood)
Click to enlarge the photograph.

These men, well-known local identities, had no formal engineering training and relied on their bush experience and plain common sense. It is understood that Tony Voykovich implemented cambering of the sharp curves of the Billygoat tramway to help keep wagons on the track.
These two men also built the middle section, which followed the route of the original wooden tramway. The long, almost flat, upper section was built by wages staff under Bert Collins, who was the prime contractor working for the KTC in the Kauaeranga area at that time. As an aside, Tony Ave in Totara, south of Thames, was named after Tony Voykovich, who, with Frank Kumerich, built all four of the Kauaeranga branch tramlines and parts of the main tramline. Tony owned a market garden at Totara in the 1950s and 60s, and the author of this article worked for him during school holidays in the late 1960s.

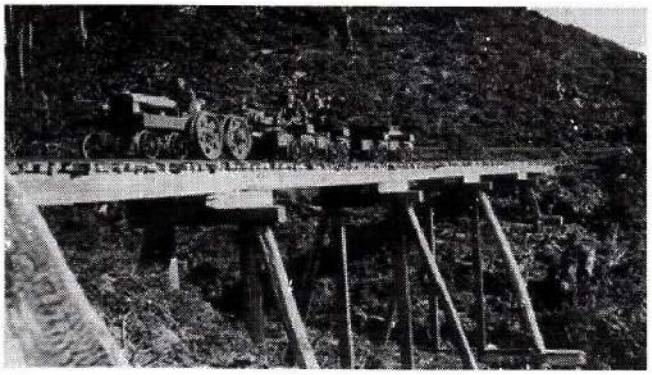


Figure 7: Fordson rail tractor with empty bogeys crossing short trestle
Click to enlarge the photograph.

Logs were hauled from where they were felled in the bush to the railhead by means of a steam winch. The section of line from the railhead to the top of the incline had its own locomotive - a Fordson rail tractor, built by A&G Prices' Foundry in Thames (Mahoney 1998). Another steam winch was used to lower logs down the steep incline section and to haul the empty bogeys back up again. At Billygoat Landing, logs were unloaded using timber jacks, winched across the Kauaeranga River and reloaded onto the main Kauaeranga tramway, which led to Thames. (For details and history of the main tramway see NZAA SRF T12/1302.) The entire Kauaeranga tramway system was decommissioned in 1928 (effectively, after the area was logged out) and the tracks were pulled up.

Survey

Several visits were made to the Billygoat tramway site over the period December 2007 - March 2008. Areas visited included Billygoat Landing, the lower section of the tramway route on the true left bank of the Atuatumoe Stream, and the upper section, which is reached via the DoC track. Around Billygoat Landing, a buckled section of rail (approx 1m long) was found, as were lengths of charred timber from the Atuatumoe Bridge, on the true left bank of the Atuatumoe.
The lower section of the incline, up to its junction with the main DoC track at WP 293, was also surveyed. This section is probably the most interesting part of the Billygoat tramway and has numerous artefacts, including several cuttings, sections

of trestle, sleepers and spikes. (Unfortunately, waypoints could not be taken as the GPS could not acquire satellite signal under the bush canopy, on an overcast, rainy day.) There is a well defined route, partially cleared and quite easy to follow, either uphill or down.

Points of interest in the upper section included the remains of two trestles, numerous cuttings and two short sections of rail that have been restored. Two unsuccessful attempts were made to find the site of the railhead and Billygoat Camp. This was due to very thick scrub and regenerating bush, and the flat, almost featureless, nature of the basin at the head of the Atuatumoe Stream.

A search was made for the dam site at the top of the falls, which was successful. Immediately south of the short trestle is a well-formed track that leads to Atuatumoe Stream. On the true left bank of the stream, two pieces of unidentified cast iron machinery were found (see photo next section). There was no obvious site for the dam, as there is no place with high, steep banks on both sides. However, possible sites were searched and the main stringer of the dam was located on the true right bank, approx 100m upstream from the short trestle. The section of stringer that remains has been squared, is approx 2m long, and is bolted to a foundation log that runs parallel with the stream. This is an apparent improvisation to overcome the lack of a suitable high bank to anchor the structure on that side of the stream. Two possible sites for the start of the log chute were found, below the stretch of the incline that bypasses Billygoat Falls. These are where there is a sharp drop-off to the west side of the ridge followed by the tramway, allowing line-of-site to the Kauaeranga River. However, no supporting evidence that confirmed the actual site was found (it was too steep to attempt to follow either of the possible routes).

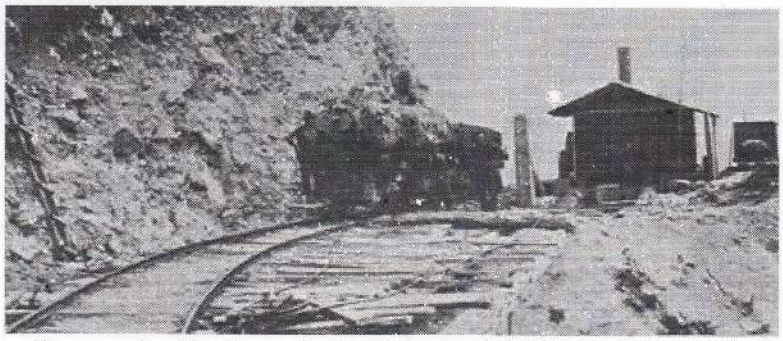


Figure 8: Hauler shed at top of Billygoat incline, housing a Judd steam winch that had extra braking to help control the descent. In addition, a brakeman rode on the rear of the wagon.
Click to enlarge the photograph.

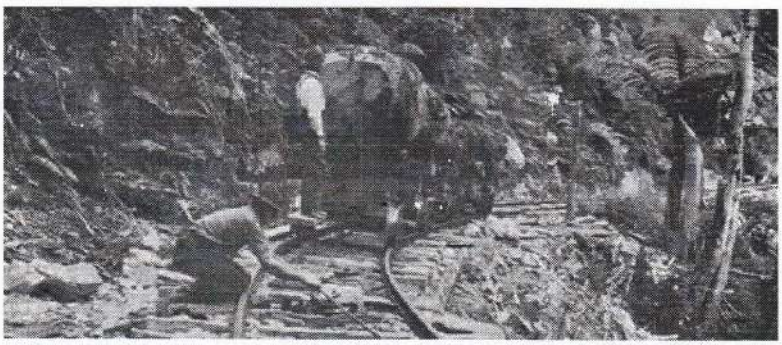


Figure 9: Preparing to lower logs down the incline.

Because of the very steep grade (maximum of 1:2.7), special equipment was used. The cable was passed around rollers to allow it to follow the bends in the track and was held down to near ground level by a special bracket below the bogey. The person in the white shirt is a visitor.

Click to enlarge the photograph.

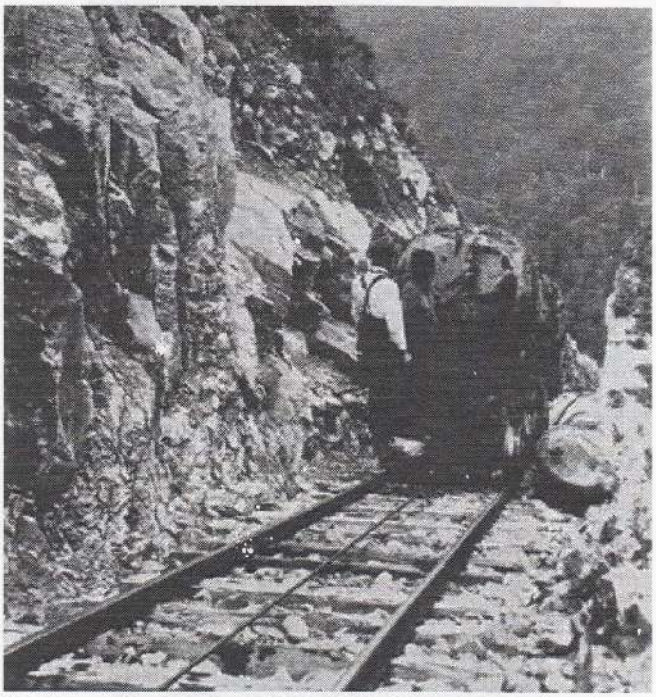


Figure 10: Logs being lowered down incline.

Click to enlarge the photograph.

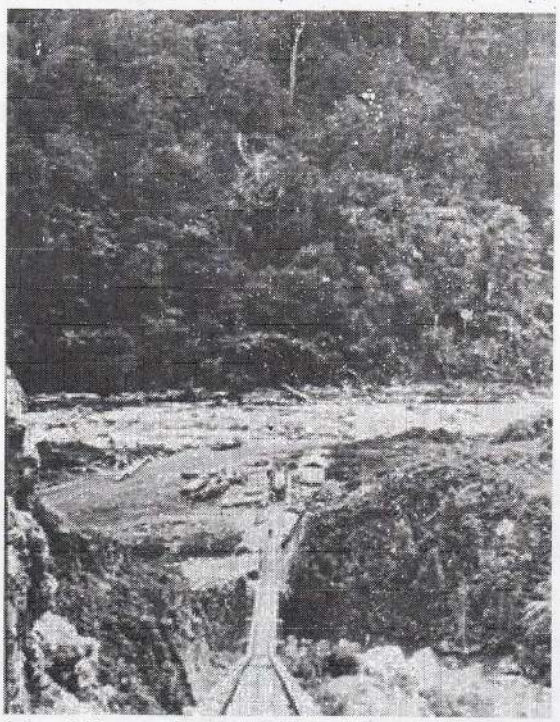


Figure 11: View down the steep section of the incline (Billygoat Landing at the bottom).
Click to enlarge the photograph.

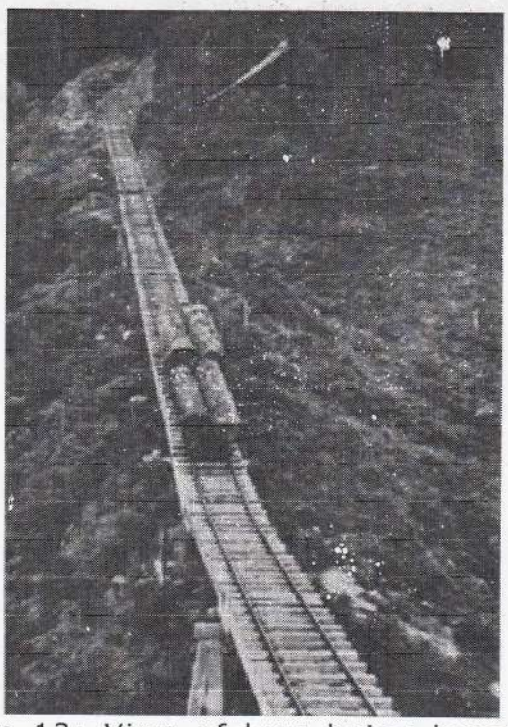


Figure 12: View of logs being lowered.
Click to enlarge the photograph.

Figure 13: Loaded bogeys crossing the Atuatumoe bridge.
Click to enlarge the photograph.

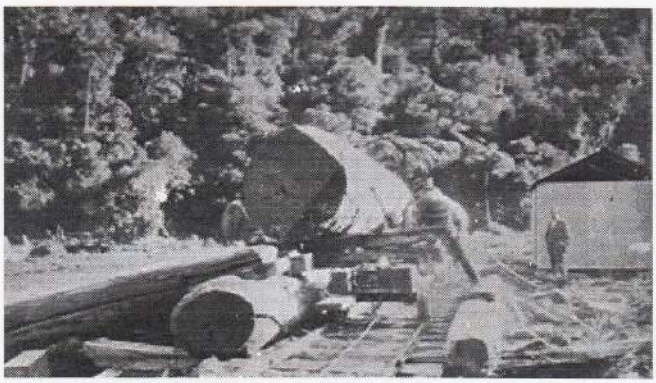


Figure 14: Logs being unloaded, using timber jacks, at Billygoat Landing.
Click to enlarge the photograph.

Figure 15: View of Billygoat Landing, with empty bogeys being winched up the incline. Billygoat Falls are near the centre and smoke from the steam winch boiler can be seen towards the top right.
View of Billygoat Landing, with empty bogeys being winched up the incline. Billygoat Falls are near the

centre and smoke from the steam winch boiler can be seen towards the top right.
Click to enlarge the photograph.

Photos of the Billygoat Location As Found Today.

References:

Hayward, B. W. (1978). Kauaeranga Kauri, Lodestar Press, Auckland.
Mahoney, P. (1998). The Era of the Bush Tram in New Zealand, IPL Books, Wellington.

The base tramway and particularly the incline is still very recognisable up the Kauaeranga Valley. It is not very far off the road end to the tramway log yard landing by the river. The incline is very accessible but is a steep climb to the top. Tramways lead from that into the hinterland with some still obvious relics (bridges) able to be seen. It is an excellent tramp for the grandkids who could then report back with what they saw!!!! Ed

Show and Tell

Top 3 : John Heald's "Contracption" !!!!!! A completed engine and progress so far.

Bottom Left : This Stewart has had quite a journey leaving England in 1956 eventually ending up (still in it's original delivery box) Rotorua to be completed by John Shelton

Bottom Right :Regan Olivecrona single cylinder overhead cam 15cc glow plug engine. We again have the latest update of this project from Regan and he has all the secrets for making cast iron piston rings!!!

Appols for the quality of the pics. Ed

Town and Around :

One of the problems we face at Waiouru is **RUST**. We recently set up a molasses bath for rust removal. We have a 1000lt tank about half full of "the brew". This large gun gives a "before and after" of what is the result of a month in the tank. As you can see a large amount of the flake rust has gone leaving bare metal. We have water blasted it and it will be returned to the bath so that the next layer of rust can be attacked and we will check again in a months time. I truly believe we will eventually be able to remove the breach block from the breach (handle on the right). Ed

Upcoming Events :

26th October 2019

Halloween Nigh Run following the Play Day. A light evening meal will be provided at 4-45pm.

9—10th November 2019

Annual Open Weekend Lunch and Dinner Saturday, Lunch Sunday. Dinner on Saturday Night will be at 5.30pm. It would be appreciated if members could bring a plate of say pikelets or similar for smokos and a salad for the Saturday evening meal.

9th to 13th January 2020

Hamilton Model Engineers **"Steam and Steel"** Convention Mark this date in you Diary NOW.!!!!!!!!!!!!!!!!!!!!!

Disclaimer :H

The views and opinions expressed in articles contained in this magazine are those of the author (s) and do not necessarily reflect the policy, position or opinion of the TMMEC or its officials.

Modelling of a different kind. Ashley Grant's masterpiece.

L-R: Ashley Grant with OPAG committee members Chris Wright, Alice Henderson and Janine Birch. PHOTOS: Matthew Farrell.

By Matthew Farrell

A giant anchor stone has been installed on the foreshore at the Ōmokoroa Domain after almost four years of planning by the Ōmokoroa Public Art Group.

The formal unveiling is yet to be arranged, but Lizard News was there as the 2.5-tonne sculpture arrived on an Ōmokoroa General Carriers truck.

OPAG commissioned Ashley Grant to design a large sculpture with a simple brief - an anchor. He says the idea of an ancient anchor stone of such scale has connotations to its placement in the harbour.

"It's about a sense of safety, permanence, and the putting down of roots. There is a rhythm of threes, originating from the three main iwi of Bay Of Plenty: Ngāi Te Rangi, Ngāti Ranginui and Ngāti Pūkenga. They are united by the triple binding of the lashing atop the sculpture. This has always been an area for recreation and gathering of kaimoana.

"The sculpture contains universal symbols of sails or sharks teeth, shell spirals and interlacing fish with woven or netting motifs. A sense of age depicted by worn drag marks, accentuated from boulders reinforce three iwi participants," says Ashley.

"With gratitude, I acknowledge Ōmokoroa General Carriers have made a very generous contribution in this long process by donating all cartage costs from the Hinuera quarry to Ōmokoroa for the sculpture and for the three accompanying rocks from Katikati.

"The two-and-a-half-ton sculpture was expertly manhandled into its final location with combined assistance from OGC's Kevin Thompson and Russell Prout, an engineering friend of mine experienced with rigging in Taranaki's oil industry. This knowledge and assistance is key to successfully placing public large scale artworks smoothly and safely."

OPAG's Janine Birch says Ashley has been wonderful to work with. She thanks grant funder Legacy Trust, Ōmokoroa General Carriers, and Pirirākau kaumātua Rawiri Kuka for his advice during consultation.

"It's artwork, not playground climbing equipment," reminds Janine.

Meanwhile, the process is underway to replace Ōmokoroa Public Art Group's Lizard sculpture stolen from the rock at the SH2 intersection. Lizard News understands a couple of proposals are being discussed with District Council staff.

Many thanks to the Lizard News for allowing reproduction of this article. Ed

TMMEC 2019 CALENDAR

02-10-19

	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T
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	SUNDAY RUNNING DAY – 10:00 – 16:00	4th MAY NIGHT RUN 5:30pm TO 9pm	EBOP — EASTERN BAY OF PLENTY OPEN WEEKEND 13-14 JULY
	OFFICIAL CLUB PLAYDAY	5th JULY 40th DINNER CITZ CLUB	WCR — WINTER CREEK RAILWAY 26 DEC BOXING DAY, BY INVITE
	COMMITEE MEETING – 19:00 START	6th JULY OPEN WEEKEND AND NIGHT RUN	MAN — MANUKAU LIVE STEAMERS 1,2,3 JUNE
	GENERAL MEETING -- 19:00 START	7th JULY OPEN WEEKEND	PN — PALMERSTON NORTH OPEN DAY 26 JAN
	ENGINEERING TUESDAY -- 19:30 START	SAFETY COMMITTEE 18:30pm START	HME — HAMILTON MODEL ENGINEERS 3RD WEEKEND MARCH
	OPEN WEEKEND	COMMITTEE AND SAFETY SAME DATE	CAMBRIDGE — 6/7 APRIL
	CANCELLED		THA — THAMES LAST WEENED OF FEB
	AGM	26 OCT HALLOWEEN NIGHT RUN	CHR — TMMEC CHRISTMAS PARTY 9 FEB
	HAMILTON NIGHT RUNS	30 NOV CHRISTMAS PARADE - 7 DEC STAND IN	