



Ancient Iron
Official Newsletter of
Marlborough Vintage & Farm Machinery Society Inc.

Issue 12

July 2018



Autumn at the Park

AGM 2018

The Annual General Meeting of MVFMS was held in the Denton building on Monday 28th May. As the photo shows, there was a good turnout of members on a cold evening. We do all look so serious!!



An election of officers was held and the following positions were filled by:

President :	Jim Donald
Vice President :	Ross Cooke
Secretary :	John Neal
Treasurer :	Errol Hadfield
Acquisitions & Disposals :	Jim Campbell
Restorations :	John Neal
Building & Maintenance :	Stan Brandish
Cottage :	Shirley Shefford
Catering :	Alison Gallop
Shows & Open Days :	Ken Barr
Health & Safety Officer :	Warren Johnston
Park Administrators :	Stan Brandish, Eddie Gallop
Bulletin Editor :	Jocelyn & John Burnett
Curator :	Position not filled. (John Burnett to continue in the interim)
Publicity Officer :	Bernard Mason
Patron :	Ian Le Grice
Cheque Signatories :	Jim Donald, John Neal, Errol Hadfield, Bernard Mason
Auditor :	Wendy Cootes (confirmed at the June Executive meeting)
Honorary Solicitor :	David Dew

The annual membership fees for 2018-2019 were set and are unchanged from last year.

\$5 for 16years and under,

\$40 single membership

\$50 double membership.

Fees to be banked into the Club account 03-1355-0701919-000

Please remember to add your name as a reference, this will make Errol's job so much easier!!

Anyone with cash, please put this in a clearly named envelope and hand to Errol or Keith.

These membership fees are NOW due and must be paid by August 2018.

Following the AGM, a short general meeting was held. Chris McKay was co opted onto the Executive in view of his leadership of the sawmill project. Chris provided an update on progress which has had a setback when the purlins for the roof went missing. After some discussion, several members pledged a donation of \$200 each towards the purchase of replacement materials. Thank You to all those members.

KATE, the Steam Roller.

Back in April, Peter Tester and his team invited members to take Kate for a drive. Several members took up this offer including Jim Donald, Karen and Allan McWha. Perhaps, this was another thing ticked off their bucket list.!!

Jim at the Helm



Alan's turn



Girls can do anything,
Aye Karen!!

Manawatu Vintage Machinery Club



During May, members of the Manawatu Club visited MVFM.

While the men looked around the sheds their partners were being shown through the cottage by Shirley Shefford. They enjoyed their visit and exchanged ideas. This group makes a point of travelling to other vintage machinery clubs at least once a year.

Ian was up early to get air pressure up to start some of the big diesel engines.



John Neal welcomed our visitors while they were having morning tea.

Mystery Object



Shirley has had the above object donated among other things to the cottage. We have had a few suggestions as to what this might be but we would love to hear from anyone that knows for sure what this was used for. We look forward to hearing from you.

New Members

Trevor Jane and Karl Slape



Trevor Jane has been a member of the radio shop for twenty years and on the Historical Society committee for three terms. With only four members in the Radio shop he decided it was time to meet other people involved in Brayshaw Park. Trevor said he is also restoring a TEA 20 and ownership of one of these almost seems to qualify you to join MVFM.

Karl comes from a farming background and has joined the Club after retiring from work. He worked for WGG Cuddon Ltd as a trainee blacksmith under the watchful eye of Bernie Hughes for awhile. He has an interest in old tractors, particularly Fordson Majors.

Park Administration Meeting

In May, Marlborough Vintage Farm Machinery hosted another evening get-together with other Clubs from Brayshaw Park. A barbeque meal was enjoyed by all present. Thanks to Park Administrators for sponsoring the meal.



John Larcombe has been tasked with identifying existing services within the park and then looking at what might be needed in the future. John said services such as water, sewerage and phone upgrades are desperately needed as well as more car parking and toilets. The land behind the museum is yet to be developed which will allow for more clubs to be based at Brayshaw Park. The Tua Marina club have applied for and have been given permission to move their club and assets onto part of this site. A single entry access to the Park is certainly something that all existing Clubs

identify with, thus increasing the security in the area. The previous Pocock Plan was also mentioned and needed to be taken into account.

Deane Heiford represented MDC, he is the Manager of Economic, Community & Support Services. He addressed the meeting and identified the need for park security and lighting as well as future proofing the area for the generations to come. Deane mentioned services such as Fibre Optics that currently deliver telecommunications might also be delivered by Radio signals in the near future, thus avoiding the cost of both laying and the expense of cables. These things all need to be taken into account by the MDC before committing to any funding.

Steve Austin spoke of the success of February's Open Day with a big attendance of young families. He attributed this to a single point advertising approach and that the public holiday was during the week. Other opportunities exist for future expansion into the tourist sector such as the cruise ships over the summer season.

Kelly Landon Lane from Marlborough Vintage Car Club spoke of his Clubs participation with the steam train and the visiting cruise ships. Club members made themselves and their cars available for displays and rides.

I think that everyone who attended the evening was happy with the progress made so far and all agreed that we needed to start somewhere. A great opportunity for each Club to talk about their current issues with a view to making improvements to the area in a constructive way for the good of all. Another meeting will be scheduled in the future to touch bases again.



Pictured left to right are Ian Conway, Jenny & Kevin Andrews, John Larcombe and Deane Heiford.

Ploughing Champs

John Butt from Blenheim won first place in the Vintage Qualifying.



Ted getting his plough ready for the big day.

Paula Jordan from Woodbourne operating the Clydesdale team from Erewhon on Saturday's practice day.



The Marlborough Qualifying Ploughing Championships were held at Rapaura over Queens Birthday weekend. Around 20 ploughers competed including two teams from Erewhon Station with their impressive Clydesdale horse drawn ploughs. Both tractor and horse drawn ploughs competed and although the weather was a little cold and wet under foot, a good crowd enjoyed the action.

Results :

Reversible/Silver Plough: 1st Ashley Seaton (Kirwee), 2nd Ian Woolley (Spring Creek), 3rd Warwick Seaton (Kirwee).

Vintage Qualifying : 1st John Butt (Blenheim), 2nd Ash Murdoch (Omaka), 3rd Linda Cosgrove (Renwick).

Vintage Non Qualifying : 1st Alsiair Dawson (Blenheim), 2nd Jeff Rowberry (Blenheim), 3rd Daniel Owen (Picton).

Farmers Class : 1st Allan Jones (Wairau Valley), 2nd Chris Law (Wairau Valley), 3rd Mark Allison (Spring Creek).

The Scow "Echo"

There are not very many parts of the Echo left now, so when MVFM received a phone call asking if we would like the two props, it was an easy "yes please".

Ian Le Grice, pictured beside one of the props, was keen to get at least one of these beside the engine we already have from the Echo. The two props are both made of cast steel, which Ian informed me was because they were cheaper to manufacture than the more usual brass props. If one or both were to break, especially while crossing the bar, or if one was to fall off which also happens from time to time (as it did with one of the Cook Strait ferries recently) then they are cheaper to replace.

With some help from John Simmons and his wee digger, Ian helps to guide one of the propellers into position beside the Vivian diesel engine which was also one of two from the old Scow.



Thanks to Roger Schroder for supplying these two photos



The Echo was built by W Brown & Sons of Te Kopuru in Northland and was launched in 1905 onto the Wairoa River for their own use as a timber trader on the Kaipara and also used for transporting coal. She was 104 feet long, weighed 126 tons, and was made from Kauri & Totara. It was fitted with two retractable centre boards, one forward and one aft, this made it ideal for crossing shallow bars and working in shallow rivers. She cost £3,700 to build, was one of New Zealand's largest two mast scows and was also one of the first to have an engine installed (30hp), with a small four bladed prop, to assist her in and out of port. At the time Northland was busy building a lot of these types of scows. They were ideal for crossing the many bars that would enable them to travel up and down rivers to small towns so they could pick up and deliver all sorts of freight. Sometime later she was sold to the Karamea Steam Ship Company where she plied between Karamea and Wellington. In 1916 the Echo was sold to Richardson and Company of Napier. Richardson and Company installed more powerful engines in 1917. They were Skandia semi-diesel hot bulb oil engines, possibly two stoke, which were started and stopped on kerosene and switched to diesel when they got hot.



THE RECENT STRANDING OF THE AUXILIARY SCHOONER ECHO ON THE BEACH AT WAIRORA, HAWKE'S BAY. VIEW SHOWING THE TEMPORARY TRAMLINE LAID WITH THE OBJECT OF BE MOVING THE FROZEN MEAT CARGO OF THE VESSEL.

The echo was then used to carry frozen meat & coal between Wairoa (Hawke's Bay) & Napier by Richardson's until the railway opened.

The photo on the left shows the Echo stranded on a beach at Wairora. A temporary tramline was laid to enable the off loading of the frozen meat.

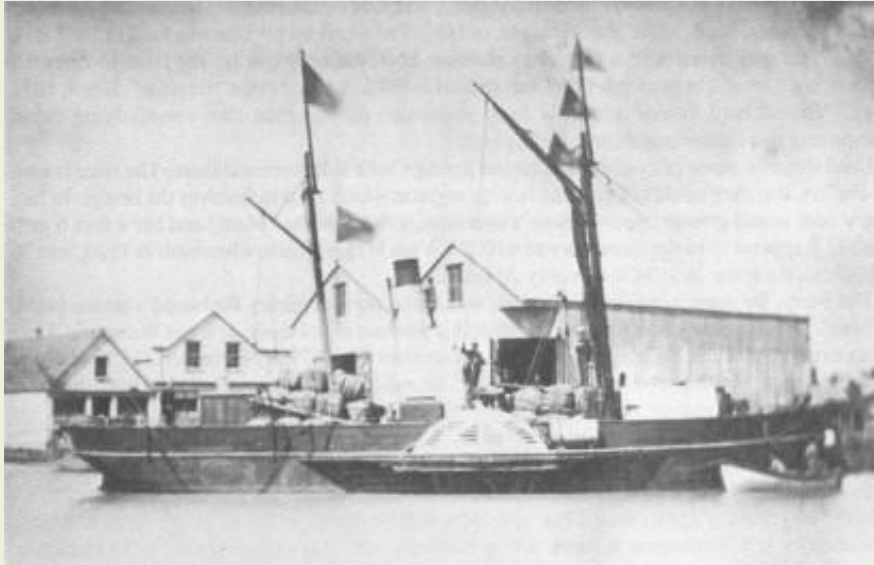
Turn back the clock to 1848 when Beavertown and its province was growing.

Marlborough produce was ferried across the Wairau Bar to larger vessels waiting in Cloudy Bay or at Port Underwood and goods were transported to Blenheim on whaleboats towed by horses walking along the riverbank. It wasn't until a major earthquake in October 1848 that caused the Wairau Lagoons to subside, resulting in greater tidal flows which scoured out the Opawa River and Wairau River mouth bar, that navigation became less difficult and schooners and steamers could transport wool directly from Blenheim to Wellington.

In November 1848, the first recorded trading vessel to cross the Wairau Bar and navigate the 20 kilometre route along the Opawa River to the small settlement of Beaverton was the Triumph, a 10 ton schooner with Captain Samuel Bowler at the helm. Bowler and his partners owned a fleet of small boats which ferried wool from Wynen's Wharf to the Boulder Bank.

From 1860 it was realised that vessels up to 40 tons could travel up the river and within a few years, a fleet of small trading vessels sailed between Blenheim, Wellington, Nelson and Christchurch.

In 1861, the Nelson - Marlborough Steam Navigation Company began trading across the Cook Strait with the 84 ton paddle steamer the Tasmanian Maid, which was wrecked on the Wairau Bar in 1862. She was followed by the Lyttleton, a 78 ton paddle steamer, which began a Wellington-Blenheim-Nelson service on 20 October, 1866.



Paddle Steamer Lyttleton. Photo taken at the foot of High Street, about where liquorland was until recently.

There was keen competition for the Cook Strait trade and Captain Thomas Eckford joined the fray in 1881 with the 30 ton steamer, Mohaka. The Wairau became a designated port with a pilot and, by the turn of the century, the Port of Wairau was controlled by the Wairau Harbour Board based in Blenheim. The Mohaka was sold in 1886 after it suffered a collision on the Opawa River with the Waihi and sunk in November of the previous year. A larger vessel was purchased, the s.s. Neptune. This very smart vessel was advertised as having superior passenger accommodation and could achieve the voyage from Blenheim to Wellington in 7½ hours. Neptune built up a flourishing trade over a ten year period and it was decided to have a second ship built at Wellington. The photograph on the right is the Steamer Neptune, having its propeller changed on the Sand Spit, Opawa River, Blenheim. Unfortunately while the next ship was being built the Neptune grounded on the Wairau Bar and became a total loss in February 1897.



The second ship was the s.s. Opawa pictured here on the left. She also sported passenger accommodation and had a stewardess as part of her crew.

The Eckford Shipping Company eventually handled most of the river trade to Wellington, operating between 1881-1965. They outlasted competitors such as the Wairau Steamship Company, which was owned by W.E. Clouston & Co., who owned several passenger and cargo steamers in direct competition with the Eckford's Opawa.



The next ship to be purchased was the Wairau, pictured here in Tory Channel about 1950. Once a topsail schooner but converted to steam in 1910 and finally in 1946 it had a 250hp diesel installed. The Wairau was in service for the Eckford's from 1912 to the mid 1950's.

The Wairau's main claim to fame was that she had capsized three times during her long career with considerable loss of life each time. Although starting life named Ronga, a topsail schooner, her rigging was gradually reduced after each mishap until she finished up as a small steam ship in 1910. This did not see an end to her misfortunes and in 1911 she was rammed by the Himatangi on the Manawatu River where she drifted ashore and sank. Following repairs, Ronga was purchased by Eckford & Co. and renamed Wairau in 1912. She was added to the Wellington - Blenheim fleet and happily managed to stay the right way up from then on. The Wairau was often laid up through a shortage of cargo during the 1930's depression. For a time during the war she was chartered by the Navy and carried out the duties of examination vessel for ships entering and leaving Wellington Harbour.

In 1946 the Wairau was converted, at Nelson, from steam ship to motor ship with a 250hp Vivian diesel giving her a service speed of 10 knots. This was a very smart speed in those days and quite a talking point among the maritime fraternity. Many larger vessels were struggling to do 9 knots during that era. Eckford's then used her on a triangular run between Blenheim, Wellington and Lyttelton. She had a draft of 6.5 to 7 feet which eventually became too deep for the Wairau bar and the Opawa River which was slowly silting up. She was laid up inside the Wairau bar in the mid 1950's, was sold in the early 60's, but never put to use and eventually ended her life on the mudflats at Motueka.



The s.s.Opawa and the a.s.Echo on the Opawa River

Of course the best-known Eckford ship was the Echo. She was bought in 1920 by Mr. G. S.(Sugden) Eckford, the eldest son of Captain Thomas Eckford, along with his younger brother, Charles Alexander (Alec) who were already helping with the day to day running of their father's shipping company prior to his death in 1917.

At about the same time the Echo was purchased they bought another topsail schooner named the May Howard. This schooner was renamed the Omaka. She was 78ft long, had a beam of 20ft, 6ft of draught and a 46hp engine. Her brief service ended in January 1921, when heading for Wellington, she capsized entering the Wellington Heads in rough weather, drowning her crew of five and the wreckage later washing up on the Petone foreshore.

The Echo has been described as the finest and sturdiest scow ever built in NZ. The size and strength of the hull structure had to be seen to be appreciated. The Chine logs were one piece running the full length of the ship. They were fourteen inches by twelve inches, rebated to take three inch bottom planks and triple skin sides. The Keelson was sixteen inches by fourteen inches and the stringers, six on each side of the centre boards, were ten inches by ten inches. To further protect it, when rubbing on the bottom of a river or when crossing bars, it had six by one Totara sheathing nailed to the bottom planks. No wonder she weighed 126 ton.

The Echo took 9.5 to 10 hours to cross the strait. She carried a range of cargo including peas, apples and Grassmere salt loaded in Blenheim. Cars, tractors, trucks, buses, caravans and engineering equipment for Cuddon's. Newsprint for the Marlborough Express also came from Wellington. The Paxman Diesel generator located at Murphy's Road Sub Station was also transported in pieces by the Echo from Wellington. The longest single items to be transported were wing spars for Safe Air. At one time she was nicknamed 'the breakfast ship' as she carried bacon and eggs on the morning trip to Wellington. The Echo made three trips a week and sometimes more between Wellington and Blenheim.



During her long service, it wasn't uncommon for the Echo to founder and become stranded on the Wairau Bar for days on end, often damaged in the process. She suffered several fires and collisions, one of those collisions was with an outhouse on the Opawa River.

While heading into Wellington in 1932 during a nasty southerly storm she was bashed onto some rocks and washed off again, turned onto her side and drifted up the harbour. The floating crane righted her and towed her to the slip so some repairs could be carried out. That episode ridded her of the Cockroaches that had made their home within the scow. On another trip, while passing Lyall Bay, she ran between two rocks putting a hole in each side of the bow. She made a dash for the Patent Slip at Evans Bay reaching it just in time. The Echo suffered other misadventures during her service including fires, collisions with willow trees on the river, broken propellers and a run in with a flax bush. On this particular occasion a flax bush became wrapped around one of the props, roots and all. The Echo was beached stern first at the bar and Bert Eckford worked under a floodlight, ducking down under the water, breaking off small pieces at a time and also running a rope to the ships winch to break off bigger pieces until it was clear. Bert commented that being in the water from 10 pm until midnight wasn't a lot of fun but was thankful that the galley fire was going when he finished and the chief had a bottle of rum on board.

One of the worst trips the master and crew of the Echo ever experienced was when she was heading for Wellington in a northerly gale with two truckloads of chaff on board and both propellers badly damaged by boulders while crossing the Bar. When she reached the North Island coast she could not make it through the heads and was blown out to sea, the props being so badly damaged they couldn't use the motors. For two days the wind kept her out off Cape Palliser coast until the tug, Toia, was able to get to her and put a line aboard and tow her back into Wellington.

There was a mishap while getting the line aboard, in the big seas the Echo's bowsprit came down on the Toia's stern and smashed the bowsprit. Tom Eckford was the master during this ordeal and he never left the wheel house for over two days.

One year Bert fitted four pairs of propellers to the Echo. Sometimes this was while she was beached at Evans Bay and often when the props were still two feet under water. Bert would fit the props to a spare shaft first to make sure the fit was tight. He also had a long shafted spanner that could be hit above water level to ensure the prop and nut were tight on the shaft.

Towards the end of the Echo's shipping service getting across the Bar was becoming more difficult with marginal depths of water. With a good swell she would bounce her way across the Bar but if she stopped the waves would wash her further into the gravel, virtually burying her in it. Then the hard work would start, 'burying a dead man'. On one occasion this involved burying a log, ten foot long, by digging a hole with shovels, six feet into the Boulder Bank with a wire rope around it, at 2 am in the morning, raining and a cold southerly blowing so they could heave on it with the ship's winch on the next high tide. This didn't always work and often more wire ropes were ran between the shore and the Echo's triple-purchase blocks, then onto the diesel winch and wait for the next high tide where she would once again heave as hard as she could. This could take up to a fortnight, often with the cast-iron sheaves in the blocks and the gear wheels breaking with the strain in the process.

Pictured below is the winch off the Echo which is situated at the back of MVFM.



With the advent of the Cook Strait Ferry, Aromoana in 1962, the end of the Eckford Shipping Company was not far away. After 45 years of outstanding service and approximately 15,000 crossings, the Echo made her last voyage in August 1965.



The Last Trip and the Echo navigates the last bend past the Boat House Theatre before being tied up at Eckford's Wharf where she would remain until about 1970.

From 1965 all local freight for the North Island was carried by railway wagons via the Cook Strait ferries. As the wagons were hired by Transport Nelson Ltd., the service was called Trans Echo. In August 1969 a disastrous fire completely destroyed the old wharf, hundreds of tons of freight plus some historical shipping photographs dating back to the first ships owned by the company. Oxygen & Acetylene cylinders were also stored there. These went off in the middle of the night like bombs. A split oxygen bottle landed outside the Blenheim Fire Station where it is now set in concrete to mark the occasion. It was a great blow to Captain Thomas Eckford whose grandfather of the same name started the locally owned river service in 1881.

This started off as a small article about the props that came off the old Scow 'Echo' but the more I looked into the history of the Echo the more interested I became. As you can see this article is twelve pages long but I could have easily written another four or five pages with more photos. I don't ever recall the Echo sailing up or down the Opawa River but Jocelyn does. As a young girl, at Riverlands School, she recalls looking out the classroom window and seeing the two masts going by. I do remember it being tied up at the wharf and finally being towed around to Picton. I mentioned to Bernard Mason that I was writing this article and he informed me that the winch off the Echo was at the back of MVFM. We went and had a look at it and it certainly is a big winch which someone has since put a couple of axles under it. One of our readers might know who used it after it came off the Echo. Bernard made the point about how it used to be used to winch itself off the bar and the tremendous amount of strain that must have put on the scow and just how well it must have been secured to the deck. Bernard also mentioned that Norm Brayshaw wanted the Echo permanently moored on the river behind the RSA but the Marlborough Catchment Board would not allow it in case it broke its moorings during a heavy flood. They were concerned it would quickly drift down to the Alfred Street Bridge and cause severe damage to the bridges construction.

I got Bert Eckford's book out of the library, 'History of the Eckford Shipping Company' and can recommend it to anyone who is interested in the history of this company (MD library Book No. 386.524). It is only a small book which I read one evening. The Eckfords were certainly hard working, resourceful and resilient. They were supported by loyal hard working staff. A lot of those staff members still have families living in Blenheim.



Thomas (Tom) Sugden Eckford

Grandson of Thomas Eckford, founder of the Eckford Shipping Company, was born in 1913 and after leaving Marlborough College in 1930 he went to sea on the Echo.

As a boy he developed an interest in radio and the Echo was soon to be the first on the New Zealand coast with a ship to shore radio – telephone built and installed by Tom. He gained his Second Mate's Ticket while working on the Echo and used this to secure a job with the Nelson based Anchor Shipping Company. After serving on several ships with this company, he had gained his Master's Ticket.

In 1946 he rejoined the family firm and took command of the 'Wairau' not long after it was converted from steam to diesel. A few years later Captain Jarman of the echo dropped dead and Tom had to quickly fill this position. He remained in this job until he came ashore in 1949 to take up the position of managing director of the family's shipping company and held this position until it ceased operations in 1965. Tom's service to shipping continued due to his election to the Marlborough Harbour Board when it was formed in 1959. He remained a member until his retirement in 1986 and died in June 1987. He was described as a quietly spoken, sincere and modest man.

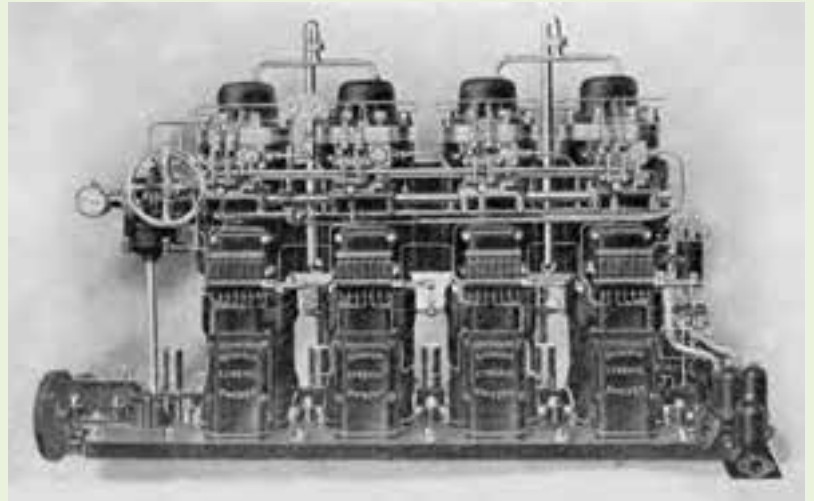
Herbert (Bert) Sugden Eckford, after leaving school, started an engineering career in Eckford's own workshop in Opawa Street under William Sidaway, who was the shore engineer from 1924 to 1948. From here Bert went to Wellington and started a five year apprenticeship as a fitter and turner with Lukis Founding. Amongst other things he worked on the 10,000 ton Trans Tasman passenger liner the Wanganella when it was in port for major repairs. Shortly after finishing his apprenticeship he developed appendicitis and had a month off work recovering where he must have thought about his future and being an engineer at sea must have presented itself as being a good opportunity. He joined the Echo as second engineer for three weeks and then relieved the chief engineer while he was on holiday. He was 22 years old and the youngest chief engineer in the New Zealand coastal trade at the time. Bert then studied for his third steam ticket, qualified and joined the Anchor Company, where he served for several years on both steam and diesel ships as third and second engineer until 1943. Because of ill health he came ashore and worked as an engineer on the Greymouth Harbour Board's tug 'Kumea' and part time on the bucket dredge 'Mawhera'. After two years he was offered a position as a charge hand at Anderson's Foundry in Lyttleton. He accepted the job and was in charge of ship repair work carrying out some big jobs in the Graving Dock. One of these was fitting new super heater tubes to the Rangitira. After two years of catching the train morning and night between Lyttleton & Christchurch he went to sea again as the Second Engineer for the Canterbury Steamship Company. Four months later he took over as chief engineer, at 31 he was the youngest chief engineer in the company and stayed with them before moving back to Blenheim in 1950. He joined the Eckford Shipping Company once again and served on the Wairau for five months until it was laid up. Bert then reopened the Eckford Engineering workshop that had been closed since William Sidaway's death. Bert worked mostly on his own but he and Tom built a slipway into the river bank just below the workshop so they could slip their own launch, Lighter or Punt. But this attracted many other customers from Blenheim, who had boats moored in Picton, who could motor their boats up the Opawa, slip them and help repair them without having to travel to Picton all the time. More bad health forced Bert to sell out and retire. He sold out to Jack Gleeson & Colin Mortimer. Colin later sold his shares to Paul Corbett. Eckford Engineering continues to this day, with Jack's son Phillip, taking over after his father retired. After two years Bert felt well enough to join Safe Air as a ground maintenance engineer and spent three years in this position before finally retiring.



BERT ECKFORD

Skandia Diesels

A well known Swedish manufacturer of industrial engine equipment, Skandia, were heavily involved with marine engines, and produced three main versions of their engines: Direct Reversing, Non-Reversing with reversing gearbox and Non-Reversing with variable pitch propeller. The smallest four-cylinder unit produced 50 to 60 bhp at about 400 rpm up to the largest at 385 bhp at 250rpm. L. Laurin founded the company together with Karl Forsström and built a Workshop in 1899 at Lysekil. Unfortunately I cannot find what model Skandia's were used in the Echo but I think they would have been the smaller four cylinder engines similar to the photo below.



Vivian Diesels

It's interesting to note that both the Echo and the Wairau had Vivian Diesels in them. The Echo had her two Vivian's installed in early 1940. Vivian was a large manufacturer of diesel engines in Canada and they were highly regarded all around the world. The Echo had her Vivian's replaced with 95 hp Gardner diesels in 1963 which had been removed from the scow 'Talisman' which worked between Nelson and Wellington.



Vivian Diesel & Munitions
Vancouver Canada



An eight cylinder block



A crankshaft for a ten cylinder is set up and ready to be machined. The calendar on the wall above the lathe is June 1943

The faces of the crank pins are being machined while two other crankshafts are also being worked on in the background.



Will Vivian produced his first single cylinder, six horsepower diesel engine in 1909 at the young age of nineteen. From there the company he founded grew in quality and stature with a line up of diesel and gas engines for marine and stationary use. He also manufactured military items for the Second World War and the Korean War.

He was born in 1890 to a poor carriage painter and for reasons unknown he left school at the age of nine. He went to sea as a cabin boy and it is here that he learned to tinker with marine engines. His next job was as a west coast fisherman and this gave him an insight into the needs of the local fishing fleet. Being mechanically minded this led him to his first job in an engineering workshop with Easthope Engine Works. He later moved to San Francisco and worked as a helper at the Hall-Scott Motor Company followed by the Imperial Engine Works.

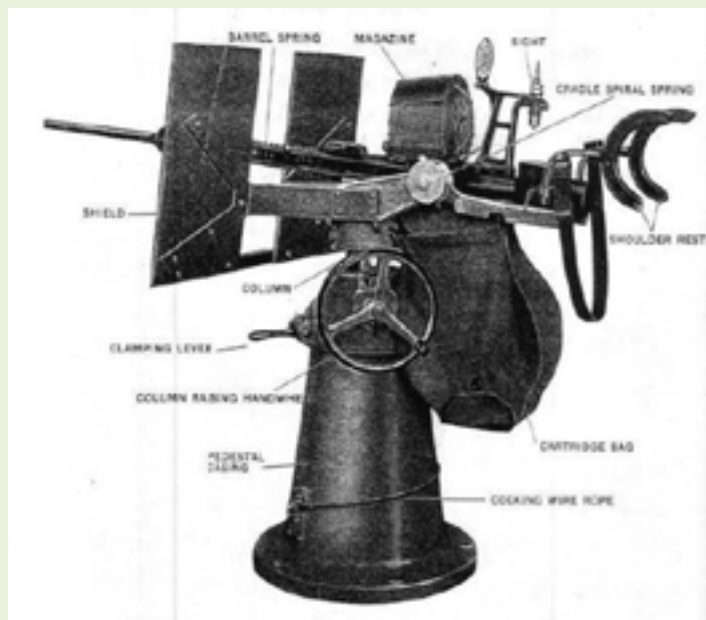
Very little is known about the early years of the Vivian Gas Engine Works but he was dedicated to quality and this became known throughout the world. During the depression years when a lot of other manufacturers were going out of business, Will Vivian never cut the wages of his workers but instead was expanding his business. Soon after the depression became the likelihood of war and Vivian was carrying out a lot of work for the British Admiralty. His engines would power tugs, minesweepers, landing ships, escort ships and at least fifty of the ships used in the Normandy landing as well as other maintenance support vessels. At the peak of the war the Vivian Works had a staff of about 1,000 and two shifts were required. At peak production the Works were making a diesel a day and there were enough orders to see them through to 1946. Immediately after the war he had orders from the shattered governments of Europe for his engines to power amongst other things, generators. Each one of these generators was capable of powering a small town of about 1200 people.

By 1949 things were not looking so good for the Vivian Companies. Several factors were working against Will Vivian. While he was busy producing and marketing his large low speed engines, other manufacturers were producing lighter high speed diesels. The British Government had just devalued the Sterling and British diesel manufacturers had cut prices by about 20 percent and there was a surplus of military equipment on the market. By August 1950 A.B.O.E Brush Group (Associated British Oil Engines) had purchased Vivian Diesels & Munitions. The British company used Vivian's premises to manufacture their own 'National' Brand of engines marketed as 'Vivian-National' and ranged from two to eight cylinder engines. Not long after this the British company also started to struggle financially and so Hawker-Siddeley were now the owners. From here the Vivian company became part of the Canadian Car Company which was a forestry equipment manufacturer. From what I can gather just about all of the Vivian records were destroyed during the 1970's.

The Wackiest Ship In The Navy

The most unusual experience for the Echo was during World War 11 when she was requisitioned by the United States Navy through the NZ Government for service in the Pacific from November 1942 – 1944 under war regulations. The US military wanted it to begin spying on the Japanese army's advances in 1942 because it blended in with non-military boats commonly seen in the area. As part of the American Navy she voyaged over 40,000 miles

before being returned to the Eckford's. She was fitted with two extra lifeboats and extra accommodation not only for the crew but also for the many downed American aircraft crews and the Allied troops she carried. Eckford's had only just installed the two Vivian diesels in the Echo when she was acquired by the US Military. The Navy also fitted two Oerliken anti-aircraft guns aboard her like the one shown below. One to port, and the other to starboard by the wheel house.



Anti-Aircraft Gun

Caliber	20mm
Length	2210 mm
Barrel Length	1246 mm
Weight	68kg
Rate of Fire	450 rounds/min
Ceiling	2,000 m
Muzzle Velocity	820 m/s

The USS Echo (Naval ID number IX95) was credited with delivering much needed supplies to the U.S troops at Guadalcanal and other parts of the Solomon Islands.



The crew of the USS Echo

American, Kathy Mackey, travelled to New Zealand to see the Echo during 2013 because her father, Albert Thompson, pictured below - back row, second on the left, was a United States Navy radio operator on board the Echo who spied on the Japanese during World War II. They didn't fly a flag or wear uniforms, they were completely undercover, and they blackened their faces to look like the native people who lived on the islands, she said. The flat-bottomed hull made the Echo ideal for sailing in the shallow waters around the islands while its ageing wooden exterior meant it blended in with fishing and transport boats used by residents. The boat was attacked once by a plane that strafed it with machine gun fire. The crew shot down a Japanese Zero and assisted in the tracking down of two Japanese submarines which were destroyed while they were on the surface.

Columbia Pictures wanted to buy the Echo for £10,000 to make a film about her exploits in the Pacific but Tom Eckford would not sell it. The story goes that Columbia Pictures weren't very happy about this so they turned the story into a comedy called *The Wackiest Ship in the Army*, starring Jack Lemmon and Ricky Nelson.



When the Echo returned from the Pacific the Vivian's had been flogged almost to death and the scow was rife with Teredo worm. Tom Eckford kept one of the big worms in his office. It was coiled into a jar of alcohol and measured 15 inches long and 5/8 of an inch thick, one of the biggest specimens of Teredo worm local shipwrights had ever seen.

The naval shipworm, *Teredo Navalis*, is not a worm at all. It is a highly specialised bivalve mollusc adapted for boring into and living in submerged wood. The genus *Teredo* is one of several genera of wood-boring bivalve shipworms.



Sawmill Project

Chris McKay and his team are making good progress with this project, although the piece of wood that Chris and Stan are pointing to must be of some concern, while John seems to be keeping his thoughts to himself!!



Thanks to everyone who is lending a hand on this Project, it will be another great display when it is finished.

Restorations

As Ted and Alan finish one David Brown they are quickly onto another one.



This time a 1947 model with a four speed transmission. Ted has been away recently with some health issues so Ian Conway has been helping with this restoration.

Safety Stuff

Warren Johnston continues to improve safety around the park. He is pictured here with some plastic chain which has been donated by Alison & Eddie Gallop, to keep our visitors at a safe distance while looking through the Engine Shed especially when Ian Le Grice has the engines operating. Thanks Warren for initiating these safety features around the park.



Acquisitions

Alan Petersen has restored this Albion Horse Drawn Mower and donated it to MVFM.

Albion harvesting machines became one of two or three leading brands in Britain during the late nineteenth and early twentieth century. Henry Harrison and Alexander McGregor formed a partnership in 1872. The first Albion implements they produced were mowing machines.

Thanks very much Alan, it's a great restoration and we hope you can make it to our next open day and put it out on display.



James Kay has recently donated this Massey Harris horse drawn cultivator which is in very good condition. Thanks James for supporting MVFM.

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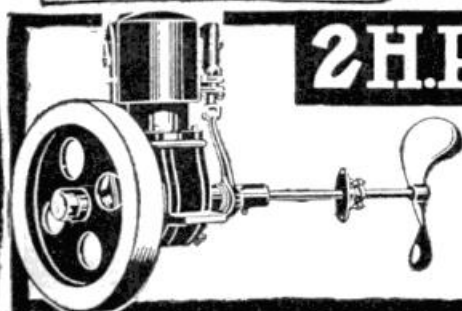
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Heritage Building

Over recent years the entrance to the Heritage Building, through the big door, has had a bit of a hard time with vehicles driving over it. This has caused the door runner to drop and risk the possibility of the big sliding door coming completely off its track. A group of members have been busy digging out the hard fill and preparing the area to strengthen it. John Simmons, Jeff Rowberry, Roger Schroder, Ross Cooke (and Jim Cresswell for making the cups of tea) along with other members who have been busy getting everything ready to pour some concrete in front of the door. Jeff Rowberry supplied his post driver and some grape posts to drive into the ground to support the concrete that will be poured.



Great work you guys, hopefully this will sort the problem out.

High Tea for the Ladies

A wonderful array of food was prepared and presented to 20 guests from the Beavertown Ladies in early April. Karen and her helpers served tea in fine china cups and fancy tea pots from a lovely wooden trolley.

Freshly made sandwiches, homemade baking, complete with jam and cream all served on fine china and sparkling silverware. A wonderful time enjoyed by all. Well done, ladies.

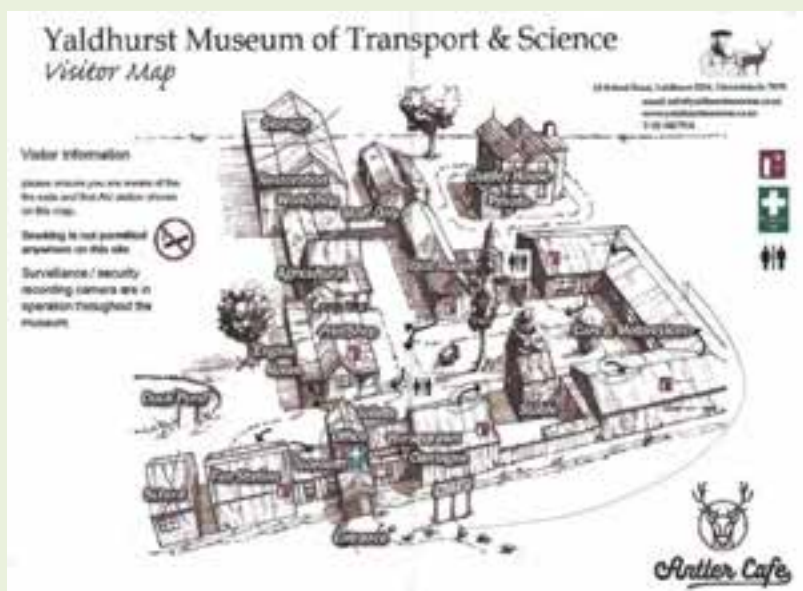


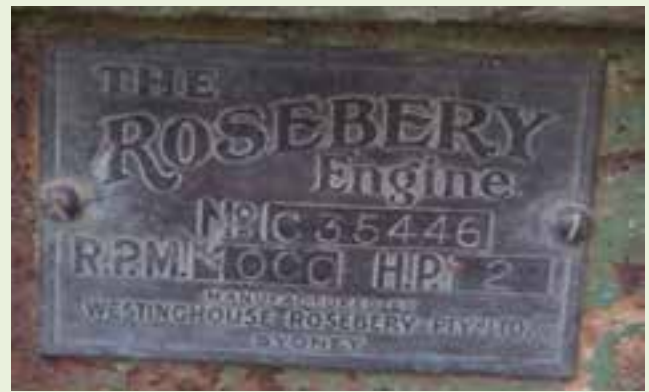
Karen was making good use of her time one Saturday afternoon while Allan and Ted were busy in the workshop. It was no trouble for her to make these wonderful tea cosies for the kitchen in between making cups of tea for the men.

Once again, a big **Thank You** Karen.



If you are ever in Christchurch, or passing through, and if you have a spare hour, call into the Yaldhurst Museum. What was once a private collection has now been sold to new owners and is well worth a stop.







And when you have finished having a look around, have a cuppa and a little bit of nice homemade baking from the **Antlers Café**.

National Transport & Toy Museum - Wanaka

We were at Wanaka in March for the A & P Show where they had about 35,000 visitors over three days. While we were there I managed to have a quick look (about three hours but you could spend 5 hours easily) around the museum. It is very large with a huge collection of everything!!





Wanaka A & P Show



George Wallis had his large collection of International Harvester tractors, crawlers, trucks, a Gen Set, a Header, a Reaper and other machines on display at the A & P Show





International Ready Power
Model RD18A15
3 Phase 75KVA @ 1500 RPM
Petrol Start/Diesel Run

If you are looking for something to do next April this might be just the thing with 50 acres of entertainment



Repco Sponsorship

Jim Hammond along with Alan McWha, Keith Worner and Peter Hart have been, one by one, going through the tractors in the south end of the Denton Building, starting and running them. Some of these tractors have not been run for some time and it takes a bit of tinkering to get them going again. Once they are going Jim likes to take them for a run around the park. Some of them run battery ignition systems and the battery he has used to jump start them is too big to fit into the hole where the battery would normally fit. Jim asked the Executive if they would purchase a small Jump Starter Pack to make this issue a bit easier to manage as Jim also has a crook shoulder. MVFM approached **Repco** to see if they would sponsor us a Jump starter which they were happy to do.



Jim has made good use of the starter pack, using it on this Case tractor and the Massey Harris pictured above, to get it running again. Thanks to Repco Auto Parts for their very kind donation to MVFM, it is very much appreciated. If you need to purchase any parts for your vehicle please consider supporting them.



Jim has also been freeing up and adjusting the valves to get the Minneapolis Moline running again.

Thanks Jim to you and your helpers for making your way through these tractors to breathe some life into them again, it's important we keep them running on a regular basis.

Battery analyser



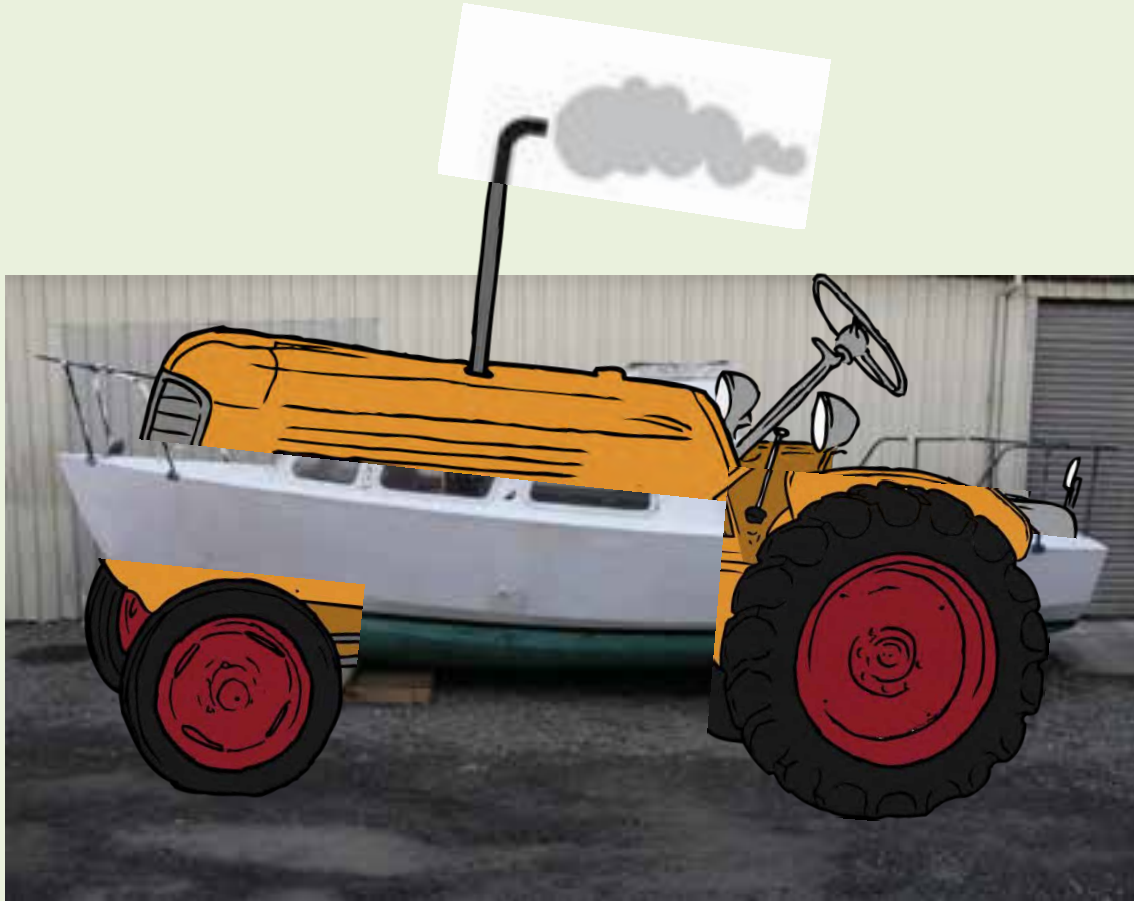
MVFM recently purchased a battery analyser from Repco to help determine the state of the many batteries that are donated to our club. Most of these batteries are now Maintenance Free and so we cannot use a hydrometer to measure the condition of the batteries. Several years ago we also purchased a battery Smart Charger to charge all the different batteries that are available. The advantage being that the Smart Charger will go into Float Mode once the battery has reached its correct charge but it will only do this if the battery is in good condition in the first place. Keith Worner is using the battery analyser here to check whether this battery is okay to be charged or whether it should go to the scrap man.

Keith has also been our acting treasurer while Errol Hadfield and his wife have been away overseas. Thanks Keith for filling this very important position for MVFM.

Bunnings Donation

MVFM were recently contacted by Bunnings to see if we would like some of this MDF Board, measuring 2700 x 800 x 18mm, which has been used as shelving. As you can see we accepted this trailer load so if anyone would like some for shelving then talk to either Bernie Mason or John Burnett.





Rumour has it John, your boat might be in for some changes soon!!



Park Photos





We hope you enjoy reading this latest edition of Ancient Iron. We are now half way through the winter and the days are slowly drawing out. Spring is around the corner and we will soon be thinking about our Open Day in October.

Some great work continues to be done around the Park. A big Thank You to everyone who gives so much of their time.

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Treasurer	Errol Hadfield	treasurer@marlboroughfarmingmuseum.nz
Editor	Jocelyn/John Burnett	burnett.family@xtra.co.nz

Upcoming Events:

Monthly meetings : first Monday of the month- 7:30pm Club Rooms, Brayshaw Park

Open Day : Marlborough Anniversary Weekend, late October 2018.