

TUGS TOWING & OFFSHORE NEWS SPECIAL “THE STEAM TUG MASTER CENTENARY PROJECT”

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*There is romance in tugboating on the British Columbia coast,
and courage and science to no small degree.*

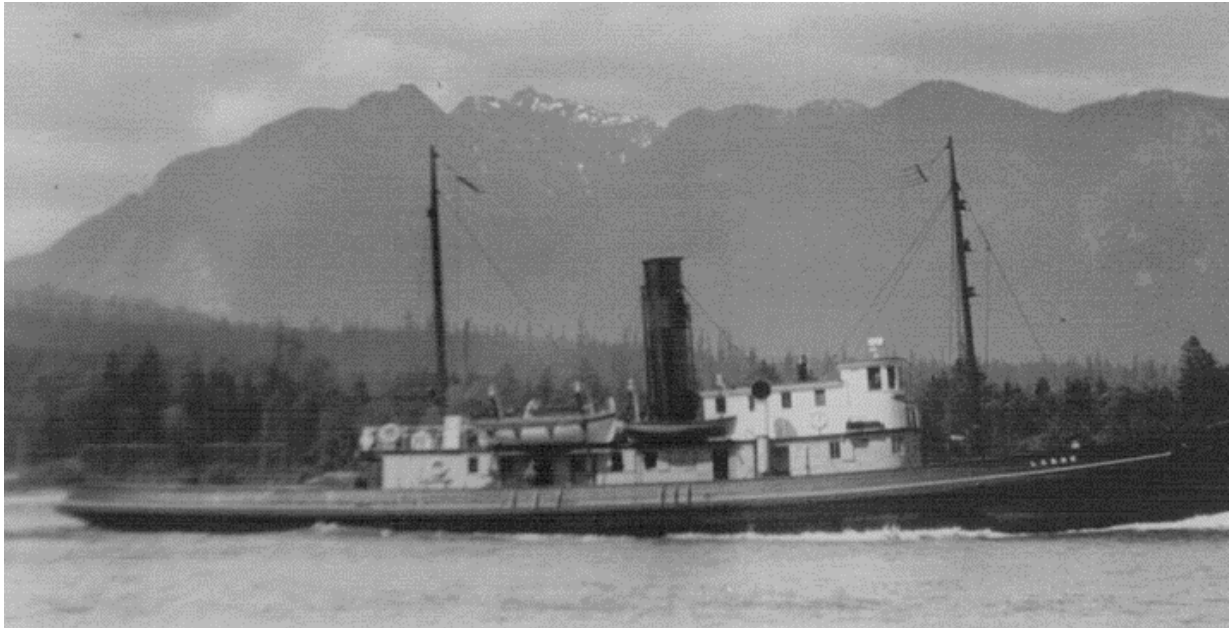
L.V. Kelly, The Vancouver Province, Sept.26, 1926

In the period between the great wars, the coast of British Columbia on Canada’s west coast was alive with new and growing industries. But this coastline, with its high, wild mountains and rugged deep inlets is no host for the likes of roads or rail lines. For almost its entire length, from the 49th parallel to the Alaskan border, the only means of moving goods along the BC coast is by sea. By great fortune almost the entire length of that coast is protected from the open Pacific by a barrier of islands, creating, amongst the world’s most favoured cruising grounds, a marine highway of protected channels. This highway became the home of tugboats and barges moving the products of the forest, fishery, and mining companies from the north and mid-coasts to the mills and factories of the big cities of Vancouver and Victoria close to the US border.



In the 1920’s and ‘30’s literally hundreds of tugs and barges were built to serve these industries. This was not glamorous work; towing rafts of logs at 1-2 knots or cumbersome wooden scows at maybe 4 or 5 knots, but it was important and valued work. It was not always easy either and many lives were lost at sea in those pioneering days.

The tugs of this era were typically quite large, from 75 to 100 feet in length and sometimes more. They were almost universally fitted with steam engines of modest power, between 300 and 500 HP. A few were even larger, among the more famous being the 151 foot long *Lorne*, as elegant a ship as ever sailed these waters.



<<Iconic BC steam tug Lorne, ca. 1920>>

After WWII many of these wooden tugs were retro-fitted with diesel engines, but only a few of them survived through the 1960's when a new fleet of higher-powered, steel-hulled diesel tugs were built to replace them. Some were converted to yachts or charter vessels or even to fishboats. Only one from this golden age of BC tugs survives today as an authentic tugboat.

That notable exception is SS *Master*, celebrating her centennial in 2022 and according to our current research is the [sole surviving wooden-hulled, steam-powered tug afloat IN THE WORLD](#).

Master was designed and built by noted shipwright Arthur Moscrop (1879-1961) on the shores of False Creek in Vancouver. Moscrop's output was prodigious. Between 1899 and 1926 he built 48 tugs, 46 scows and 2 "freighters" at his modest Beach Ave Shipyard.

<<Moscrop's family>>

He was retained in 1928 by the Burrard Drydock Company to supervise the construction of the famed RCMP patrol ship *St. Roch*, the first vessel to navigate the Northwest Passage from west to east and the first to circumnavigate North America.



Master was built for Capt. Herman Thorsen of Vancouver. Thorsen retained full ownership until 1927 when the Master Towing Company was incorporated and took title of the ship along with a mortgage back to Thorsen. This mortgage was transferred to the Home Oil Company in 1933. First working for Fraser Mills and later chartered to the Lamb Logging Company, she put in general log and barge towing service from up coast to the mills in False Creek and elsewhere. In 1940, she was purchased by the Marpole Towing Company, joining her sister ship, the *R.F.M.* The stack was painted with the Marpole colours, black diamonds on a white band on an orange stack. *Master* wears these colours to this day. The black diamonds, which had been the insignia of Marpole Towing since shortly after the turn of the century, signified the towing of coal barges from Vancouver Island to the company's plant in Coal Harbour, Vancouver. In 1947, control of the Marpole Towing Company was



assumed by Evans, Coleman and Evans (Evco) – although actual title to the ship was not transferred until 1959.

<< *Master in Vancouver Harbour ca.1930 (courtesy Vancouver Maritime Museum)>>*

Around 1951, she had become part of the operations of the Gilley Bros. fleet, another subsidiary of Evans, Coleman but her Marpole colours remained unchanged. Evco ultimately became part of the Ocean

Cement Group, which was later absorbed by the Lehigh Cement company, now Lehigh-Hansen Inc., and itself part of the international Heidelberg Cement Group. All those companies have changed; the *Master* remains as her original self!

Her duties consisted mostly of coastwise towing of logs and barges laden with sand, gravel, limestone and coal. That essential but unsung work, save coal, remains much the same today.

Master runs on steam. That system is comprised of a Scotch boiler and triple expansion steam engine rated at approximately 322 BHP. The steam system also operates the steering engine, electrical generator, towing winch, anchor windlass, and the condenser/boiler water transfer pumps. The Master's engine, produced in 1916 in the UK by William Beardmore's Speedwell Iron Works Co. in Coatbridge, Scotland, was originally built for a British mine sweeper. The engine was never used and after the war the engine was sold as surplus and fitted to the *Master*. The engine is now 106 years old and after towing over a million miles, it is still in original condition and running well.

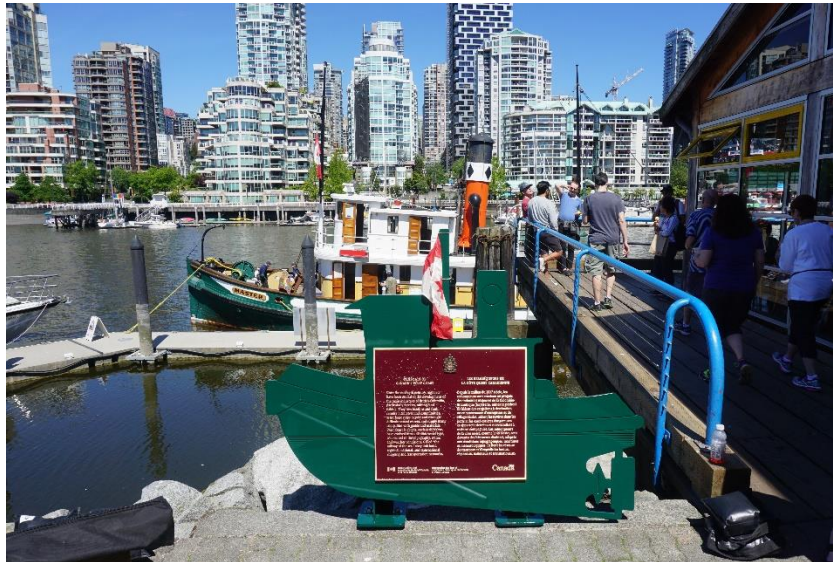
Like her counterparts, supplanted in 1959 by steel, diesel-powered tugs, *Master* was left to deteriorate. However, in 1962 the local branch of the World Ship Society saw the promise in this fine little ship and restored her to a semblance of her past glory. That work has subsequently been taken over by the *SS Master Society*, a small group of admittedly aging

volunteers, who for nearly 60 years have cared for her, showing her off up and down the coast, educating residents and visitors alike about the important role of tugboats in the development of the B.C. coastal economy. In 2018 the Historic Sites and Monuments Board of Canada recognized “Tugboats of Canada’s West Coast” as “an Event of National Historic Significance” with the unveiling of a plaque at Granville Island, and specifically acknowledging SS Master.

Recognition of the critical role of tugboats in the BC economy

<<Commemorative plaque at Vancouver’s Granville Island celebrating “Tugboats of Canada’s West Coast”, and Master (background) in particular>>

In late May 2018 a handsome bronze plaque, provided by Parks Canada and the Historic Sites and Monuments Board of Canada (HSMBC) was unveiled on Granville Island in the heart of Vancouver.



The plaque recognizes the national historic significance of the tugboats of Canada’s West Coast. Although focussed on the historic role which tugboats have played, the event also highlighted the importance which tugs continue to provide in the commerce of British Columbia.



The wording on the plaque reads (in both English and French) as follows:

Since the mid-19th century, tugboats have been crucial to the development of the main coastal industries of British Columbia and its main industries, such as forestry, mining, and fishing. They have towed loads to and from remote businesses and isolated communities, assisted large vessels in port and through difficult coastal waters, and supplied many companies with critical materials and goods for

transport. West Coast tugboats like S.S. **Master** have evolved into a distinct vessel type, well-suited to the B.C. topography, water, and weather conditions. Called “the railway of

the sea,” they have linked local, regional, national, and trans-national shipping and transportation networks.

The genesis of this important acknowledgement began in about 2010 when the SS *Master* Society applied to the HSMBC for this recognition which was finally granted in 2015. It is gratifying that the SS Master, the last remaining operational wooden steam-powered tug in North America, received special mention in this citation as it nears its centenary in 2022.

The plaque is now mounted prominently on an aluminium plate representation of a classic west coast tug, designed by Robert Allan Ltd. and beautifully executed by our friends at Adrenalin Marine.



Speaking at the unveiling, Rob Allan emphasized the critical importance of tugs in all aspects of global commerce as follows:

“Quite simply, and without exaggeration, without tugboats the business of the world would completely grind to a halt...

As proof of that claim, consider these facts:

❖ In British Columbia:

- No logs would move to sawmills
- No wood chips would move to pulp mills
- No fuel would move to the many small north and mid-coast communities
- No heavy equipment would be moved to remote coastal logging or construction sites
- No gravel, clinker or limestone would move to cement plants

❖ In the Port of Vancouver (or any other Port you care to name!):

- Virtually no ships would move in or out of port (large ships at very low speeds are effectively un-maneuvrable and require tug assistance to steer)

<<In 2019 she was also recognized by the Maritime Museum of B.C. as a recipient of the Beaver Medal for maritime excellence. (<https://mmbc.bc.ca/s-s-beaver-medal/>)>>

- No containers full of goods from Asia would arrive here; store shelves would soon empty. The Dollar Stores would close!
 - No bulk products would leave the port; mines would close, prairie farmers would be swamped by their grain
 - Road and rail links would be choked
 - English Bay and all the anchorages in the Gulf Islands would be choked beyond capacity with idle ships
- ❖ And globally this situation would simply be magnified:
- Every major world port would cease to operate, depending as they do entirely on tugs for ship movements in and out
 - Without the services of high-performance escort and support tugs, oil and gas terminals would be unable to deliver their products by sea
 - The Panama and Suez Canals (and many other critical waterways) would cease to operate, requiring as they do tugs and their skilled crews to control every ship movement
 - Ocean shipping of all forms (with the possible exception of cruise ships) would effectively come to a halt...however without maritime commerce those cruise ships would soon have no passengers, and they too would have to drop anchor.

And finally, for any ship or boat in distress out on the water, who do they call when they're in trouble? ... not a cruise ship or some glittery pleasure yacht or a fishboat ... they call for a TUG!

And so it is; this oft overlooked and neglected waterfront workhorse is in fact the keystone of the world's economy, for without it there would be no shipping, hence no exports or imports of consequence.

Life as we know it would effectively end! The Tugboat is King!

The SS Master Centenary Restoration Project:

Master is the iconic working vessel of the BC west coast today, representing the legacy of towboats, shipbuilding and design



that has played such an important role in the economic development and character of the BC coast. At 100 years of age however, *Master's* future hangs in the balance, and this most significant of vessels needs the support of everyone who works in, on, or around the waterfront, or indeed of any who care for our collective maritime heritage. The *SS Master Society* has therefore launched the *SS Master Centenary Project*, with the objective of completing all necessary repairs so that in celebration of *Master's* first hundred years we will also ensure that this symbol of the BC towing industry will be celebrated for many more years to come.



Estimates for the full scope of repairs required to *Master* are in the range of Cdn \$ 3,000,000. This is the fundraising goal of the project over the next 2 years. Essential repairs include replacement of the aft bulwarks, rim timber, deck beams, possibly horn timber, replacement of upper deck, deck beam repairs, and other repairs to deckhouse and wheelhouse. Also required are overhauls of the Scotch boiler, the triple expansion steam engine, and the steam-driven towing winch and anchor windlass. The latter tasks are being gratefully undertaken today by iconic winch manufacturer Burrard Iron Works, one of BC's most long-lived marine equipment companies. (<http://www.burrardironworks.com/>)



This project is an excellent opportunity for BC mariners, boaters, shipyard workers, marine workers and the towboat industry in particular to demonstrate a pride and determination equal to that shown on Canada's east coast in the recent rebuilding of the *Bluenose*. The *Master* is the west coast equivalent of *Bluenose* and even more importantly, is uniquely an original vessel, not a replica. Shipwrights estimate *Master* to be about 80% original.

As documented in many books and publications, the BC towboat history is full of extraordinary characters and stories of incredible enterprise. Many rugged individuals from designers and builders to Captains, crew and Owners worked hard to establish the BC towboat industry as one of the largest and most important in the world from the 1870s to the present day. These

same abilities today can help to preserve our industry's living history as represented by the **Master**.

<<It must not happen that the telegraph of the ss Master is stopped>>

So why should we keep an old tug afloat? It has to do with the recognition and appreciation of our Province's maritime heritage, celebrating those who came before us, building the foundations upon which the abundant life we enjoy today is based. It has to do with recognizing publicly and prominently the vital role that the towboat industry has played and continues to play in the commerce of the Province today. Virtually all goods and services to BC coastal communities move by tug and barge.

Most great cities in the world feature an historical vessel on their waterfront. Think **Cutty Sark**, **HMS Victory**, **USS Constitution**, **Queen Mary**, **Kon Tiki**, **Fram** and now **Maud** and many more. These vessels all have community and civic (and frequently national) support. San Francisco has **Hercules**, a steel steam-powered tug and **C.A. Thayer**, a west coast lumber schooner rebuilt at a cost of \$14 million. San Diego has **Star of India** and others. Washington State has the steamship **Virginia V** (a \$6.5 million restoration), **WT Preston** in Anacortes and the **Sand Man** tugboat in Olympia. In each case communities and societies have raised money, put in a huge effort and preserved a critical part of their local maritime history and identity. In each case people have said that this vessel is too important to our heritage and identity to let it go derelict. In BC, the citizens of Campbell River deserve great credit for preserving the wooden seiner **BCP45** in their Maritime Heritage Centre, and the Vancouver Maritime Museum features the RCMP **St. Roch**. Both these local vessels are however locked on land. Vancouver has no working vessel other than the **Master** that is alive and on the water;



wonder of a steam-powered vessel. The **Master** also journeys to many other places in BC to attend events and maritime festivals as an ambassador of the BC shipbuilding and towing industries.



original, functional, meaningful to local maritime history, and accessible to the public.

<<St. Roch>>

The **Master** is fully engaged with the public for much of the year at Granville Island or at the Historic Britannia Shipyard in Steveston BC. Visitors from all over the world are thrilled to experience this vital part of BC history and get a sense of the

However at her mature age, *Master* can no longer be preserved by a handful of committed volunteer Society members; far greater support and resources are required. Master requires and deserves the support of everyone who values our maritime heritage. The SS Master Centenary Project is the beginning of the process of preserving this lovely iconic, unique, and valuable tug as the last existing operational wooden steam tug in the world.



Please help; get on board and lend your much-needed support! Please pledge your (tax-deductible!) support for the SS Master Centenary Project by direct donation to: <https://www.ssmaster.org/support-us/> or mail a cheque to

SS MASTER Society

c/o Vancouver Maritime Museum

1905 Ogden Avenue

Vancouver, BC V6J 1A3

The project is supported by



Towingline/Tugs Towing & Offshore News wishes that this tugboat may be rescued from the wreckers hammer



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