

Irvine harbour – dredgers and tugs

An account compiled by I J Dickson, 2014

Dredgers were essential to prevent the harbour silting up. The channel had to be kept open, in the mid-20th century, for coastal vessels up to a depth of sixteen or seventeen feet. Getting over ‘the bar’ in Irvine always has been and always will be the difficulty but, once inside, you are in the safest harbour on the Clyde coast, also one of the most sheltered. (FF¹ p10)

Dredging was also necessary to allow ships to get to the dockyard and to be launched. The Garnock is tidal to the Dirrans in Kilwinning and the Irvine is tidal to the weir (depending on the gates). Some ships had to anchor out in the bay until the tide was high enough to allow them over the bar mouth or until the channel was dredged to allow them over. (ED²)

Dredge Boat, 1752

“In 1752 the Harbour was possessed of a Dredge Boat, as a [Burgh] Minute of 29 Jan. of that year directs men to be employed to manage it and thereafterwards it came to grief having been arrested for some debt.” (JP³ p126).

First dredger, 1869

Following the acquisition of a tug in 1857 (see below), the prospects of Irvine harbour, in competition against Troon and Ardrossan, became much brighter, so “in 1867 a Provisional order was obtained authorizing the Burgh to advance £10,000 to be expended in improving the Wharfage and in 1869 a Dredger of approved plan was provided⁴ which deepened the Bar to about 12 feet of ordinary tides, & the Berths inside to 8 feet low water, so that vessels were always kept afloat”. (JP p136)

By 1890, a member of the Harbour Trust⁵ could comment⁶ “We have nursed the 50 ton vessel long enough” – the coal agents John Smith & Co. had written to the Trust that the depth of water at the bar was “not sufficient for their trade in shipping coal, and unless remedied would compel them to send the trade to Troon”; coal exports were running at 3,000 tons a week at the time, representing from 75% to 100% of the weekly exports. A typical monthly amount being dredged at that time was (Jan. 1891) 1482 tons from the bar and 1140 from the harbour, giving a depth of water at the bar of about 13ft.

¹ FF: ed. Mae McEwan, “Fullarton Folk Reminiscence” (1985), available on the Irvine Harbourside site (www.irvineharbourside.org) under Resources

² ED.: notes from Elspeth Dickson, syllabus secretary of the Fullarton Historical Society (2014)

³ JP: ex-Provost John Paterson (1827-98, writing c.1880), handwritten notes based on Burgh documents, transcribed and available on the Irvine Harbourside site (www.irvineharbourside.org) under Resources

⁴ During the term of office of Provost George Brown (1867-1872), later commemorated in the name of a tug.

⁵ The Harbour Trust membership is of interest. The ‘Irvine Herald’ diarist, in his column “Chatterings, by the Steeple Jackdaw” wrote (14.2.1890): “The Harbour Trust and Town Council agreed to hold a *joint* meeting anent railway amalgamation, but how to distinguish the two bodies, the one from the other, seems kind o’ queer. The Trust, which is composed almost wholly of members of Council, confab with the Council, and the Council confab with the Trust. There should be general agreement between *both bodies*.”

⁶ Quoted in the report of the Trust monthly meeting, ‘Irvine Herald’, 17 Jan 1890

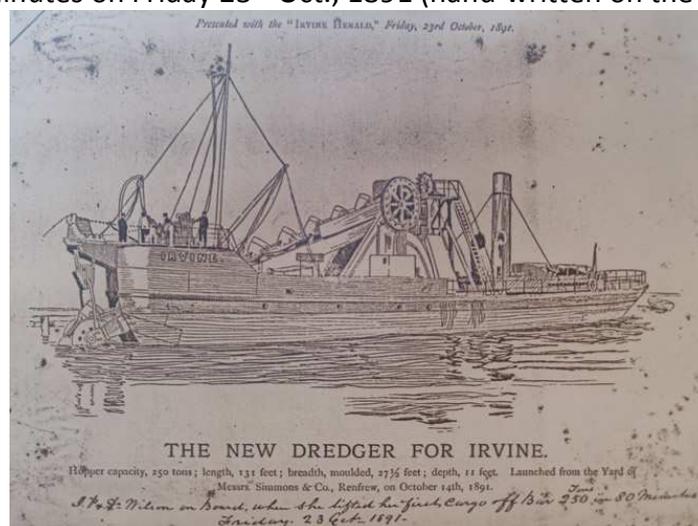
By then, the Irvine Harbour Trust had succeeded in building up some reserves, so it decided to purchase a new dredger, coincidentally at about the same time as the Trust was reminded by the Board of Trade that the Harbour Act required them to have a sinking fund. "With a good nest-egg on hand, many of the members considered the Trust in a fair way towards carrying the dredger-purchase resolution into effect, as agreed by the December [1890] meeting. The reply of the Board of Trade in regard to a sinking fund has not at any rate assisted the dredgerites. . . . the Board, as Provost Watt pointed out, does not seem to recognise in the light of a sinking fund any improvements which may have been made on the harbour or addition to plant."⁷

The dredger decision was, like any decision, not popular with all. A letter to the local press⁸ in 1891, from 'Hiawatha', takes issue with a previous correspondent 'Native', and gives some interesting details regarding both the dredger and its importance:

"He refers to the old dredger and what was expected of her, and, according to ['Native'], she has been a complete failure. Now I say quite the reverse . . . The present dredger has done a great deal of good work for her capabilities; but now she is not fit to do the work at Irvine, therefore a new dredger is required for a greater depth of water so as to allow the trade to be carried out as at Ayr or other ports, as we are getting steamers coming to our port drawing from 12 to 15 feet of water, whereas ten years ago we scarcely had one steamer trading to our port. . . I am very much pleased to see 'the certain Bailie' and the rest of his supporters taking a step, as I think, in the right direction of trying to purchase a dredger qualified to do the work and keep up with our neighbours. . . [Even if] the outer jetties [are run] a little further out . . . still we would require the dredger . . . the same men – and I think fewer, with less coal – ought to be required for the new dredger, which will also require no hopper barges, or tug to tow them, and this will be a great saving over the old dredger."

New dredger, 'Irvine', 1891

The hopper dredger 'Irvine' was launched by Messrs Simons & Co, Renfrew, on October 14th, 1891. The insert presented with the 'Irvine Herald' of Friday 23rd Oct. records its dimensions: hopper capacity 250 tons, length 131 ft, breadth, moulded, 27½ ft, depth 11 ft (printed on the insert, which mis-spells the ship-builder's name). She lifted her first cargo, of 250 tons, off the Bar, in 80 minutes on Friday 23rd Oct., 1891 (hand-written on the insert).



⁷ 'Irvine Herald' comment in Feb., 1891.

⁸ 'Irvine Herald', 18 Feb., 1891

She was the 43rd of 87 hopper dredgers built by Simons of Renfrew between 1872 and 1925. (CM⁹). There is currently a photo of the dredger in the Museum display.

“In the 19th century, the steam engine and new shipbuilding techniques were brought together to create the Bucket Dredger. These tall ungainly ships consisted of a hull, U-shaped in plan, through which ran a chain of giant buckets on a massive moveable frame. The frame was dropped at one end until the buckets scraped the river bed. Using up to four anchors, or ropes to the shore, the dredger could be moved with great accuracy, eating up the river bed as it went. . . [Their] distinctive screeching sound is caused by the great chains and gear wheels. . . When the loaded buckets reach the top of the frame they roll over, and the silt is directed to a chute to port or starboard, falling into a [separate] hopper [ship] below.” (SMM¹⁰) In the case of the ‘Irvine’, a hopper dredger, the silt was deposited in an on-board hopper for transportation. (DB¹¹)

New dredger, ‘Irvine’, 1911

Though trade at the harbour was limited, a new dredger, the 161-ft 530-ton steam dredger “Irvine”, was acquired in 1911. (JS¹² p171) A bucket dredger, built in 1911 by Fleming & Ferguson Ltd, Paisley, at a cost of £11,000 for the Harbour Trust, later owned by the Irvine Harbour Coy (Lloyd’s Register).

In 1919 the Ayrshire Dockyard Company took over responsibility for the entire harbour, with its dredger, tug and wharf installations. (JS p184)

Captain Metcalfe came to Irvine in 1942 taking up the position of master of the ‘Irvine’, a position he held until 1966 when he had to retire due to ill health. He was extremely proud of his command. The crew consisted of sons of the harbour, including two Bicker brothers, two Howie brothers and three cousins, all named Anderson. According to Captain Metcalfe, the decline of the Harbour began in the 1960s when Ardeer stopped importing raw materials. Dredging activities ceased and the harbour has silted up ever since. He was an active member of Fullarton Historical Society. (FF p10; Capt. Metcalfe pictured on p25) His retirement is elsewhere stated as 1962 rather than 1966. (ED)

The ‘spoil’ from the dredgers was dumped in the Clyde, and basking sharks fed on the ‘spoil’! The ‘Irvine’ is remembered as being “very noisy”. His son Colin lives in Australia. (FHS¹³)

The dredger was “a mighty beast. . . [It] had an inverted v-shaped metal superstructure which carried the buckets which were dragged along the bottom of the river, picking up the silt and gravel and then dumping it into the hold to be emptied at sea. I assume that the dredger also worked its way along the coast, keeping all of the harbours in good condition and allowing safe access. . . She was definitely a hefty piece of machinery and made a lot of

⁹ CM: Clyde Maritime website on Wm Simon, Renfrew: http://www.clydemaritime.co.uk/wm_simon

¹⁰ SMM: Scottish Maritime Museum information board on Dredging

¹¹ DB: dredger description at <http://www.dredgebrokers.com/>

¹² JS: John Strawhorn, “The History of Irvine” (1985)

¹³ FHS: Oral memories of members of Fullarton Historical Society, 2014.

noise when dredging.” “[I have been sent] a picture of the dredger moored in Aberdeen. . . It was usually moored just opposite the Ship Inn.” (TB¹⁴)

In 1969, the “Irvine”, by then 58 years old, was sent to the ship-breakers, signalling the virtual demise of Irvine as a commercial port. (JS p220)

Dredger “Slaney”, 1914

The ‘Slaney’, a 120-ft 250-ton hopper dredger, was launched in 1896 – the 62nd of the 87 built by Simons of Renfrew – and went to Wexford, a town on the River Slaney. (CM) Purchased by Ayrshire Dockyard c.1914, it was wrecked on North Shore in 1935. (ED)

The 1985 booklet records “the ‘Stanley’, also in use, [which] belonged to the shipyard”. (FF. p10), but this is clearly a mis-named reference to the “Slaney”.

Dredger “Sandpiper”, 1960s-1970s

“Today, [dredging] is done by the ‘Sandpiper’, a Suction Dredger”. . . They work like a huge vacuum cleaner, sometimes putting as many as four nozzles over the side.” (SMM)

The ‘Sandpiper’ was used by ICI in the 1960s and 1970s. It is not the 5,000-ton dredger of that name built for India in 1906 (CM), nor the inland dredger of that name built in Germany in 1952, nor the one of that name built in 1904 for Dublin, which went to Canada. (JG¹⁵).

The MV “Kyles”, a Museum exhibit

Built as a coaster in 1872 by John Fullarton & Co., Paisley, the ‘Kyles’, which has had many uses in its long life (documented in ‘Sea Breezes’), was, between 1921 and 1939, “used as a suction dredger on the Avon and Severn [lifting sand and gravel for the building industry]. . . Kyles carried its own cargo of silt, like most suction dredgers, it, but [unlike others] had to laboriously pump it out again at sea.” (SMM) It is the oldest iron Clyde-built vessel still afloat in the UK and is currently moored at the pontoons.

Tugs at Irvine

First tug, 1857

“In 1856 it was represented to the Trustees that Irvine laboured under a very considerable disadvantage compared with Troon & Ardrossan in having no Tug Steamer to assist the vessels in entering or sailing from the Harbour & consequently after much deliberation in the Trust and Town Council, it was agreed to purchase a Tug which resolution was carried out by Mr Dick etc proceeding to Newcastle and acquiring the ‘Scottish Maid’ for £1200 - which gave a new impetus to the Harbour. The Burgh had to advance £1100 of the price and this was dissented from by the then Provost¹⁶, Senr Bailie & Treasurer. JP [*John Paterson, the writer*], who was a Bailie at the time, signed the Bill along with the other Magistrates. Before

¹⁴ TB: Tom Barlow, writing in the “Irvine Times” (5 & 19 Feb., 2014)

¹⁵ JG: Jim Grant, a Scottish Maritime Museum researcher, who was kind enough to check this account.

¹⁶ Provost Thomas Campbell of Annfield, who served an unusually long term of office (1851-1864).

the Tug was got the vessels entering and sailing had to be warped out by their crews in a small boat in front, when the weather was calm, which was a most laborious business.” (JP p136) Whether the ‘Scottish Maid’ was new or had a previous history, we do not yet know, as tugs were not included in Lloyd’s Register in that period.

New tug, 1871 – an error

The ‘History of Irvine’ records that the ‘Scottish Maid’ was, in 1871, replaced by the ‘Irvine’. (JS p151). However, the ‘George Brown’ was built in 1887 to replace the ‘Scottish Maid’. (ED). We believe that JS, apparently unaware of the purchase of a dredger (‘Irvine’) in 1891, confused one digit in the date, and concluded that a tug ‘Irvine’ arrived in 1871. The ‘History’, we suggest, should record (a) that the tug ‘Scottish Maid’ was, in 1887, replaced by the ‘George Brown’, and (b) that the old dredger was, in 1891, replaced by the ‘Irvine’.

Tug, ‘Vivid’ – 1883

A Thames paddle tug¹⁷ built by T Hepple and Son, Low Walker, Newcastle, in 1863 (L89' B17.8' D9.2', serving originally at Gravesend), the fifth owner of the ‘Vivid’ is recorded as Irvine Harbour Trust, from 1883. Sold in 1890, she sank in 1892. We hope to find out more on this vessel, as currently there is no other mention of her being at Irvine.

New tug, 1887

The paddle steamer SS ‘George Brown’ was named after the Provost of 1867-72 & 1880-81¹⁸. In operation for 70 years until 1957 (S. p151, photo on p148), it was the last paddle tug on the Clyde when replaced. (S. p220) Built by S McKnight, Ayr Shipyard and launched 11th Jan., 1887, it measured length 93 ft, breadth 18.1 ft, was owned by Irvine Harbour Trust Co., and left Irvine in Jan. 1957 to be scrapped in Feb., 1957. (CS¹⁹; permission to use photo will be sought.) The ‘George Brown’ was insured for £3,000, the annual premium being £120.²⁰



¹⁷ <http://thamestugs.co.uk/EARLY-TUG-NAMES-R-Z.php> and <http://www.tynetugs.co.uk/vivid1863.html>

¹⁸ During his first term of office, the Council banned the sale of liquor on the Moor on Marymass Saturday. When this was relaxed, he re-entered local politics in an attempt to enforce the ban. The ban, incidentally, may have given rise to the custom, until recent years, of publicans providing refreshments to those taking part in the parade, who would have no internal fortification at the end of their walk.

¹⁹ CS: clydesite.co.uk – <http://www.clydesite.co.uk/clydebuilt/viewship.asp?id=20250>

²⁰ ‘Irvine Herald’, 14.3.1890

New tug: 1957

The MV 'Garnock', launched on 4th Oct., 1956, by George Brown & Company, Greenock, for the Irvine Harbour Company (as subsidiary of ICI), and owned by Irvine Harbour Trust, served Irvine harbour for 27 years until 1984. It is now one of the exhibits of the Scottish Maritime Museum, sitting in mud near the café, its windows out and showing wood deterioration and rust. The photo (CS²¹; permission to use will be sought) shows it in better state at the Museum pontoons, as a more eye-catching 'visitor attraction' than it is at present.



Capt. Matthew Campbell named his (previously unnamed) house 'Garnock View' not because it would be (just!) possible to view the River Garnock from it, but because he would moor the 'Garnock' at this part of the wharf. He continued living there after retirement, during ill-health. (JW²²)

Rather an alarming incident ended its working life in Feb., 1984. She not only towed ships which were loading and unloading explosives at the ICI Ardeer wharf, but latterly was also used to dump nitro-glycerine explosives in the estuary. This was done by sending them by chain to some distance behind the ship. Unfortunately, on this fateful day, a lack of communication led to the chain being hauled in for the end of the day and the engine being switched on, causing a box to be sucked to 30ft from the stern. The resulting explosion damaged the aft end and propeller of the 'Garnock', necessitating the Troon lifeboat to attend and tow her into harbour. The explosion caused the green paint in the hands of a crew member, who was about to apply it carefully to some surface in the wheelhouse, to be liberally splashed around the wheelhouse, and the engineer who reported to the captain jaloused that they might have brought forward their retirement. Repairs were not an economic proposition, so after some essential work she was donated to the Maritime Museum.

Footnote: A F McLannet, in his "Royal Burgh of Irvine" (1938) makes no mention of either the dredgers or the tugs which enabled Irvine to remain a viable harbour.

Ian J Dickson
prepared for the Irvine Harbourside Heritage website
March 2014

²¹ CS: clydesite.co.uk – <http://www.clydesite.co.uk/clydebuilt/viewship.asp?id=6>

²² JW: Jim Whyte, current owner of the house.