

TICKLEPENNY TRIUMPH!

Ticklepenny Lock near Louth is one of the oldest and most unusual locks in England – with scalloped sides designed to withstand the sodden Lincolnshire fens. In this report, Ted O’Neill follows the Waterways Recovery Group’s third summer of restoration work on this remarkable structure, part of a nationwide effort that has already brought more than 500 miles of waterway back to life.

The Waterways Recovery Group, part of the Inland waterways Association, has brought a team of people to Louth three summers in a row to rebuild a very interesting and unusual lock.

Being more than 300 years younger, the locks on The Louth Navigation may not have the history of Leonardo da Vinci’s locks in Milan, but they’re some of the oldest in England, and in their own way, they’re just as fascinating.

Ticklepenny Lock is one of just a few locks in the world to have scalloped sides - five of the other remaining locks on the navigation have a similar construction.

The ‘barrel-shaped’ design, featuring elliptical bays, was engineered this way to give stability in extremely wet ground conditions. Effectively, each ‘arch on its side’ protects the canal from the waterlogged soil of the Lincolnshire fens.

In the last 75 years, since the Inland Waterways Association was formed, more than 500 miles of waterway have been restored, but there are also more than 500 miles of waterway yet to restore.

The IWA’s Waterways Recovery Group supports restoration projects across England and Wales through week-long residential projects, and shorter weekend trips known as ‘Canal Camps’ and their supporters and members are known as ‘Navvies’ after the historic canal builders of another age.

In 2024, volunteers came to Louth from London, Huddersfield, Bedford, Dundee, Lichfield, Paris, Troon, East Kilbride, and Bordeaux, with the French volunteers recruited via the charity Rempart - this



Michael Lillman, copyright of Waterways Restoration Trust.





Old and new stones in position, new ones not mortared in, awaiting Heritage approval

year there were volunteers from Devon and Dundee, Harlepool, Middlesbrough and Surrey.

In 2025, one of the smaller jobs was to repair some cracks in the lock wall, digging out the mortar, inserting Helifix reinforcing and re-mortaring.

Two volunteers donned waders and lifejackets, to do stitch drilling and raking out mortar either side of the cracks, to a depth of 35mm.

Camp leader, Mick Lilliman took on the task of re-building of the upstream offside arch support wall, the arch itself being structurally sound. He put on waders and a lifejacket and carefully removed brickwork until he reached undamaged masonry.



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Sloping wall joining onto existing lock wall.

Michael Lilliman, copyright of Waterways Restoration Trust.

THE LOUTH CANAL

One of Britain's least known canals connects the North Sea at the mouth of the River Humber to a beautiful town in Lincolnshire. The town of Louth.

The Louth Canal, or more correctly, the 'Louth Navigation' starts at the so-called 'Riverhead' in the town centre, following the River Lud before heading north in an artificial channel to Tetney Haven in the Humber Estuary, 25 miles downstream of the port of Hull.

Completed in 1770, The Louth Canal was one of the earliest of Britain's waterways of the industrial age: only nine years after the Bridgewater Canal opened in 1761 and only 13 years after the Sankey Canal - Britain's very first canal of the Industrial Revolution.

The canal features very unusual locks, built like sideways arches to resist the compression from very wet land surrounding the waterway.

As soon as the canal opened, local producers were able to export their valuable cereal crops and Lincolnshire Long Wool. Sheep and wool have long been a valuable commodity nearby since mediaeval times.

Goods arrived in Louth up the Louth Navigation Canal principally from the other side of the Humber Estuary, from Hull, and many commodities were brought to Hull from ports around the Baltic Sea.

Wool was transported to the Yorkshire markets of Leeds and Wakefield. Louth-built vessels also imported and exported Iron, Stone, Coal, Building Materials, Market Goods and grain to the Yorkshire and Lincolnshire ports and all along the east coast, but it didn't end there.

At the top end of the Louth Canal, a shipbuilding industry developed and different boats travelled from Louth and Hull through the north sea and the Baltic Sea, trading in Copenhagen, Gdansk and even as far away as Riga in modern Latvia.

The boats they built included Cutters, Clippers, Humber Keels, Sloops, Humber Sloops, Billyboys, Yorkshire Billyboys, Ketch-Rigged Billyboys, Schooners, Clipper Sloops and Clipper Schooners. There are records of them all being built at the Riverhead.

The waterway was a commercial success until the early 1900s, but revenues dropped quickly and after devastating floods after the first world war, Louth Navigation ceased operations in 1924.

The Louth Canal was out of action for a hundred years and was re-opened this year to kayaks, canoes and stand-up paddleboard users with the construction of a slipway at Austen Fen.

For more information about the history of the Louth Canal, to support its conservation or to visit with your paddleboard, visit: louthnavigationtrust.org.uk



LNT member Pete repairing the arch support wall, working in waders. good job the weather was dry.



First new "stone" placed in position. The void at the back will be filled with lime mortar.

Mick said: "Fortunately, sound brickwork was found above water level. The brickwork was rebuilt, and a local volunteer completed the brickwork wearing waders."

The work needed two types of mortar: lime mortar and cement mortar. The lime mortar is used for brick repairs and cement mortar, and concrete is used for the coping stones.

The team's cement mixer is kept very busy, especially on days when they need cement for making stones and lime mortar.

The electric mixer was washed out regularly between mix changes and volunteers also mixed lime mortar in a barrow.

On the offside downstream side the lock tail wall had collapsed.

Mick said: "Our ace bricklayer and his gang worked in the shade to first clear the wall down to sound brickwork and then start the rebuild."

On the other side of the lock the buttress wall had reached the level of requiring an access platform to do sloping brickwork at one end and coping stones at the wharf wall end.

The River Lud flows through Ticklepenny Lock so it's always in water.

Mick said: "We noted a coping stone in the lock so with the help of locals, two



Cracks repaired and remortared

camp volunteers managed to get the stone into position.”

This “real” stone was used to demarcate the transition to sloping brickwork. Four volunteers worked on a sloping wall. This required bricks and blocks cut at an angle, provided by Mick once he managed to start the bricksaw.

Mick said: “‘Fake’ coping stones were required to fill in the remaining part of the flat wall. It was originally going to be cast in situ, but to obtain Heritage approval we cast them separately and placed them in position without mortaring them in.

“So we needed a production team to make ‘stones’.”

One gentleman provided the expertise and the tools to make the formwork, assisted by two apprentice chippies. Once the formwork was unpeeled the stones were “distressed” to make them look more like the real thing.

Mick said: “Stones were manhandled, sack-barrowed, rolled and grunted into position.”

A public-spirited owner of a local reclamation yard not only donated most of the bricks, but helped a great deal by bringing his telehandler to lower the stones into position.

To find out more about the team visit waterways.org.uk and follow the links to ‘restoration’ and ‘Recovery Group’.



Offside arch repaired



Ready for cutting bricks. Full PPE and dust suppression kit ready to go.



Tone expertly cast



The offside wall gang




The ‘crack’ repair team

Weekend events are generally very cheap to get involved with and the WRG charges only £15-£20 per volunteer.

This year they are still planning two weekend digs in the Wey and Arun Canal and a reunion event based around Grove locks on the Wilts and Berks Canal.

In January there is a weekend dig in the Chelmer and Blackwater Navigation and in February there will be a weekend dig in the Shrewsbury and Newport Canals.

To join the ‘Navvies’ team visit: waterways.org.uk/navvies-subscription 

TOLLS ON THE LOUTH CANAL

Louth Navigation Table of Tolls (amounts in shillings) From and after June 24, 1887

For every TON of Sugar, Molasses, Currants, Raisins & Figs.	1	8
For every TON of Slate, Timber, Deals and Freestone.	1	8
For every TON of Coals.	1	0
For every FORTY BUSHELS of Cinders, Coke or Culm.	1	0
For every EIGHTY TODS of Wool, of 28lb to each Tod.	2	0
For every ONE THOUSAND of Stock Bricks, Paving Bricks, Floor Bricks or Pantiles.	2	0
For every ONE THOUSAND of Common Bricks.	1	0
For every QUARTER of Rye-Grass Seed and Hay Seed	0	2
For every TWELVE BUNCHES of Plaster Laths	0	4
For every QUARTER of Wheat, Beans, Peas, Lentils, Barley, Malt, Oats, Rape Seed or Linseed	0	4
For every TON of Cotton Seed, Bones, Bone Ash, Guano, Vitriol, Super-Phosphates and other artificial manures	1	6
For every TON of Cotton Oil, Linseed Oil, Rape Oil and Gas Tar manufactured in Louth.	1	4
For every TON or Chaldron of Lime.	1	6
For every TON of Farm Manure and Night Soil, Granite, Gravel, Slag and other Road Materials.	0	9
For every TON of all other Goods, Wares and Merchandise	1	8