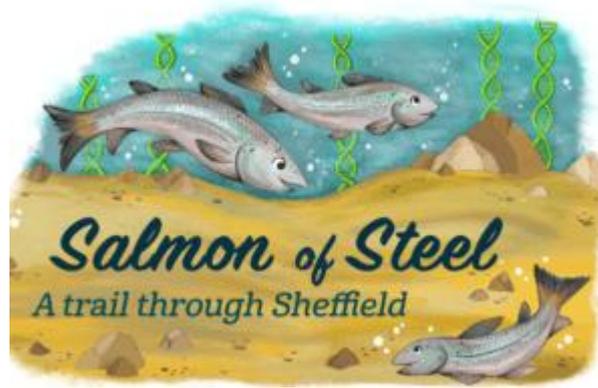




The  
University  
Of  
Sheffield.

## Steel City River Walk

Join us to hear stories of Sheffield as we walk through the city along the riverbank and canal, taking us from Kelham Island to the Salmon of Steel Sculpture at Sheffield Station.



A map of the walk to accompany this collection of stories is provided at the end of this document or download the map here -

<https://mk0festivalofthw28id.kinstacdn.com/wp-content/uploads/sites/2/2020/09/FINAL-MAP-Salmon-of-Steel-Trail-2020.pdf>

Created for the Festival of the Mind 2020 by the Salmon of Steel team, featuring guest speakers

Contributors:

Dr Ed Shaw, Don Catchment Rivers Trust

Chris Firth MBE, Don Catchment Rivers Trust

Sally Hyslop, Don Catchment Rivers Trust

Prof John Moreland, University of Sheffield

Paul Richards, Sheffield Wildlife Trust

Lizzie Dealey, Canal & River Trust

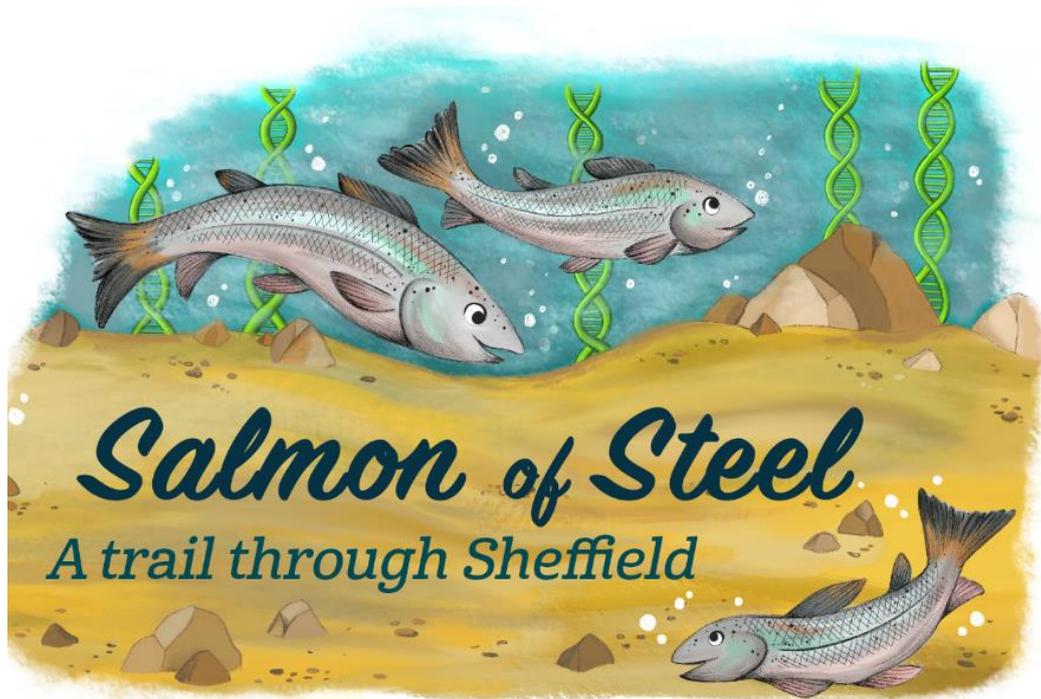
Illustrations by Sophie Carter

Podcast designed by Dr Deborah Dawson, University of Sheffield

Podcast produced by K. Turner sounds

This transcript is available to listen as a podcast on [Podbean](#) -

<https://festivalofthemind.sheffield.ac.uk/2020/spiegeltent/salmon-of-steel-city-river-walk-podcast/>



Let us take you on a journey, both along the River Don in Sheffield, and also through time to tell the story of the river and how it has shaped Sheffield. We will hear about castles, graveyards, salmon, steel and even elephants, which are all connected in various ways to the Don. There will be lows, with the death of the Don, but ultimately it is a story of hope, with the ecological rebirth of the river.

We start our journey at Kelham Island Museum, in one of Sheffield's oldest industrial districts. This building was once a powerhouse for the city of Sheffield, generating electricity for the city's tram network. Before electricity, the river was used to fuel Sheffield. Weirs harnessed the power of the river's water to turn watermills, first it was used for milling corn but later powering foundries of Sheffield Steel. Look for the weir spanning the river and the goit that creates the 'Kelham island'. Kelham Island weir was just one of many weirs throughout the city of Sheffield.

In 1760 it was recorded that there were 161 weirs between the centre of Sheffield and the headwaters of the river, that actually equated to a weir every 300m of river length. As far as fish populations were concerned, fish became trapped between these structures, but most profoundly affected was salmon because salmon needed to ascend the river right up into the headwaters to reproduce successfully and ascending all these structures became physically impossible. By the end of the 18th century, 1796, salmon populations were recorded as having disappeared completely from the River Don system.

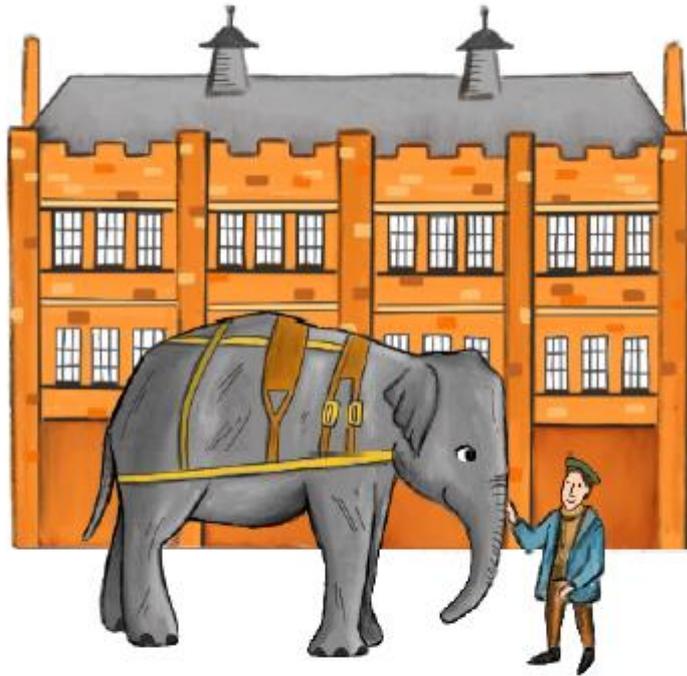


Sheffield's rivers are intertwined with the city's industrial past, and clues to this rich history are all around on the riverbanks, where many toiled and grafted. Next we will hear of one of the more unusual residents of Sheffield who lived and worked on the banks of the Don.

Hi, I'm Sally Hyslop and I work for the Don Catchment Rivers Trust which works to protect and restore the rivers of the Don catchment area. Thanks to the rich industrial history of the Don, the river here in Sheffield is surrounded by fascinating buildings, all with their own story to tell, but none quite so interesting as the story of Castle House and the Royal Exchange Buildings that stand on Lady's bridge.

The beautiful burnt orange glaze of the bricks make this collection of buildings pop out against the landscape. Victorian Architects originally chose to use glazed bricks in industrial areas such as these, as they were easily cleaned of smoke and soot.

Originally built as a vets, it housed a dog's home and stables. You can see a carving that reads 'horses' as you pass the side of the building. But later on it housed a much bigger guest. During World War One, an Indian elephant called Lizzie could be found here. During the war, a circus had come to the city and settled in the area. Lizzie, one of the animal menagerie, was loaned to Ward's Steel to haul metal, in replacement of horses which had been conscripted for the war effort. She was looked after by the circus' lion tamer 'Alfonzo' and slept in the stables of this building. The steel produced in Sheffield was crucial to the war effort and Lizzie would be seen collecting scrap metal around the city, to keep up the demand in metal production.



As we travel further back in time to the Medieval Period we return to an age when the sparkling clean rivers of Sheffield were relatively unspoilt and shoals of Salmon swam from the sea, many miles up the Don to reach their spawning grounds in the city. Some undoubtedly ended up on the plates of people in the village of Sheffield or fed the inhabitants of the dominating castle. John Moreland shares the story of Sheffield's Castle on the banks of the River Don.

My name is John Moreland and I am a Professor of Medieval Archaeology at the University of Sheffield. I lead our Castlegate project which has studied the records of excavations carried out on the site of Sheffield Castle in the 1920s and 1950s, and, working with Sheffield City Council, The Friends of Sheffield Castle, and Wessex Archaeology, seeks to use the heritage of this area to effect its regeneration.

Sheffield Castle was located on a slight eminence at the junction of the Sheaf and the Don. Excavations by Wessex Archaeology in late summer 2018 have demonstrated that the earliest significant settlement here was a classic Norman motte and bailey castle – probably dating to the early to mid-12<sup>th</sup> century. The fortified mound stood in the middle of what is now the castle site, perhaps surrounded by a moat, but certainly

with a palisaded enclosure defining the area overlooking the Don. By the end of the 13<sup>th</sup> century, the castle was a magnificent construction – with high walls, towers, a gate-house, and a deep moat. Texts from the late 15<sup>th</sup> century tell us that among the castle buildings were three towers, a prison, a great hall, a chapel, kitchen, bakehouse, and guesthouse. So, while it was certainly formidable, it is also clear that it could provide the hospitality demanded and expected by its aristocratic residents and visitors (something we'll come back to).

The monumental nature of the castle was highlighted by the scale of the remains discovered during excavations by local men Leslie Armstrong and Joseph Himsworth in the 1920s and by Leslie Butcher in the 1950s. They showed that the walls of the gatehouse still stood 7m high, and that the bottom of the moat lay 11m below the level of the modern Exchange Street. The waterlogged nature of the deposits in the moat, what they referred to as 'black tenacious sludge, none too fragrant' contained many important finds, including -

cannon-balls and stone ballista-balls, knives, keys, personal ornaments, coins, glass, ... and leather ... kitchen refuse such as potsherds, animal bones, antlers of red deer, roe and fallow deer, and oyster shells (Armstrong 1930, 15).

These finds, and those made by Wessex Archaeology in 2018, provide us with tremendous insights into life in Sheffield in the later part of the middle ages. The leather, for example, allows us to talk about 15<sup>th</sup> century fashions in footwear, while the animal bones (and there were some fish bones too) provide insights into diet and feasting – but they also force us to place the castle in a wider landscape. Where did the deer, and the fish, come from? I'll come back to that in a moment, but first I want to say a little about one of the castle's most famous residents.

Mary, Queen of Scots arrived at Sheffield Castle in November 1570, and spent 14 years there as prisoner. Elizabeth I probably chose Sheffield Castle as prison for Queen Mary because, George, 6<sup>th</sup> Earl of Shrewsbury, had the wealth needed to maintain a woman who, as Patrick Collinson has pointed out, 'had to be realistically seen as a possible, even probable future ruler of England'. Collinson's summary of expenditure on Mary's upkeep in the last months of her life show both the expense of keeping a captive queen (and her entourage), and the kinds of things they ate and drank –

Mary and her people consumed, or at least had placed on their tables, 353 tuns of beer ... Twenty-eight tuns of white wine from Gascony. The meat bill came to a colossal £2,279.2.4., including 158 carcasses of beef, 1341 sheep, 497 calves, 398 lambs, almost a thousand pigs of different kinds, ... and £617 worth of sundry poultry, pigeons and rabbits. The fish bill, for £1,569.5.11., covered 721 codfish, 489 ling, and salmon, turbot, salt eels, white herrings, red herrings, sprats, pike, barbel, chub, tench and perch. Forty gallons of olive oil were required to dress the salads.

While these accounts relate to the time after she had left Sheffield castle, they highlight the fact that late medieval aristocracies provisioned their feasts from a rich and varied landscape. Clearly some of the elements came from overseas (remember the white wine from Gascony), but much, perhaps most, would have come from the surrounding landscape.

One of the central aims of our work on Sheffield castle has been to situate it in its contemporary lordly landscape – including the great deer park which rose eastwards to the hunting lodge we call Manor Lodge. Sheffield deer park was one of the largest in medieval England, and was probably the source for the ‘fifty does and twenty nine red deere’ killed and cooked for the ‘great dinner’ that followed the funeral of Francis Talbot, 5<sup>th</sup> Earl of Shrewsbury, on 21st October 1560, and of the red deer, roe deer and fallow deer antlers found by Leslie Armstrong in 1927. A letter from Francis Talbot records the supply of bucks from the park to the court of Henry VIII in 1541, while in the early 17th century the 7<sup>th</sup> Earl, Gilbert, had bucks driven to an area near the town where the parish butchers were allowed to kill as many as they were able. In the late 16th century, the 6<sup>th</sup> Earl’s servant Robert Bradshaw wrote to him about supplies to the castle, including wine, fish, pasties, venison, and pheasants, to be laid in at Sheffield for Christmas. Parks typically contained not only deer but also rabbits, hares, wild boar, pigs, game birds, cattle, sheep and fish – and there is good evidence that many of these were to be found in Sheffield Park.

In a survey of 1637, conducted by John Harrison for the Earl of Arundel, we are told that -

ye scite of ye Mannor or Mansion house called Sheffeld Castle being fairely built with stone & very spacious containeth divers buildings & Lodgings about an Inward Court yard & all offices thereto be-longing having a Great Ditch about ye same ye Great River of Doun lying on ye north parte thereof & ye Lesser River called ye Little Sheath on ye East parte thereof haveing on ye South an outward Court Yard or fould builded round with diverse houses of office as an armory a Granary, Barnes Stables & divers Lodgeings

Harrison stressed the bountiful nature of the ‘manner of Sheffield’ – highlighting the ‘straitnesse and bignesse’ of the trees in the Park, the presence of good building stone, and grinding stones for ‘knives and scithes’. He then went on to say that

This Mannor is not onely profitable but for pleasure alsoe, being furnished with red Deare and Ffallow, with hares and some Roes, with Phesants & great store of partridges, & moore Game in abundance both black & red, as moore Cockes, moore Hens & young pootes upon ye moores, as also Mallard, Teale, Hearnshewes [Heron] & Plover

Importantly, he went on to say that

Ye chiefest fishing within this Mannor is in ye River that passeth through the same, wherein are great store of Salmon, Trouts, Chevens, Eles and other small fish.

The aristocracy of Sheffield Castle not only claimed ownership of, dominion over, this bounteous natural world, they defined themselves as aristocrats by killing and eating it. But it was also the route to resistance of lordly power. On the 17<sup>th</sup> December 1657, local poachers Daniel Bingley and James Bromley, in a clear act of defiance, fixed a deer's head to the cross in Sheffield marketplace with a note pronouncing their hunting as legal and noting that there was once a Parliament 'engaged to root out & suppress all Lords of Mannors'.

Perhaps the three men depicted in the water at the junction of the Sheaf and Don in the 1825 painting of 'the River Sheaf and Shrewsbury Hospital', currently on display in Weston Park Museum, were also availing themselves of the Lord's bounty – but it wouldn't be available for much longer. The castle had been demolished in the middle of the 17<sup>th</sup> century, and the site was subsequently covered in factories, steel works, hotels – and slaughterhouses were built along the south bank of the Don in the late 18<sup>th</sup> century. A description of the area in 1875 makes for very grim reading –

On either side of Lady's Bridge ... are low black looking buildings, and beneath it a stream of ink. ... Looking over the bridge towards Blonk-street, the long black wall of the killing Shambles may be seen, an object to be almost pitied were it human, in its filthiness. ... Pouring from openings in the walls of these Shambles is the refuse from the slaughterhouses, poisoning the river and rendering the atmosphere in this vicinity almost pestilential (Sheffield Daily Telegraph).

Things have changed much since then, and we are now looking forward to the regeneration of Castlegate. However that happens, whatever form it takes, we would hope that it works in harmony with Nature, rather than seeking to dominate it – as both medieval aristocrats and 19<sup>th</sup> century industrialists, each in their own way, tried to do.

The 1825 painting of 'the River Sheaf and Shrewsbury Hospital', is currently on display in Sheffield's Weston Park Museum. The three men depicted in the water are at the junction of the River Sheaf and River Don (looking up the Sheaf). The castle-like building on the right hand side is, in fact, the late eighteenth century slaughterhouses, built to look like a medieval castle. Slaughterhouse effluent was just one of many forms of pollution that poisoned the Don. The river channel also served as a convenient conduit for disposing of waste, not just from factories and workshops, but also the waste produced by Sheffielders themselves, which we hear about next.

As the Industrial Revolution turned Sheffield from a small town into industrial city, so the population swelled with families coming to the city to find work. In 1801 the population of Sheffield was 45,755, in just 90 years the population had boomed to

325,547. With no adequate means of disposing of the waste created by the population, the streets became awash with sewage which flushed into streams and gullies and into the Don.

For a long time the situation was accepted by authorities as the river was at the time one of the most effective ways of disposing of waste. This attitude is made manifest in the former Victorian public loos at Blonk Street. These small round squat Grade II listed buildings sit directly above the confluence of the River Sheaf with the Don, and for good reason. They allowed Sheffielders to relieve themselves straight into the river.

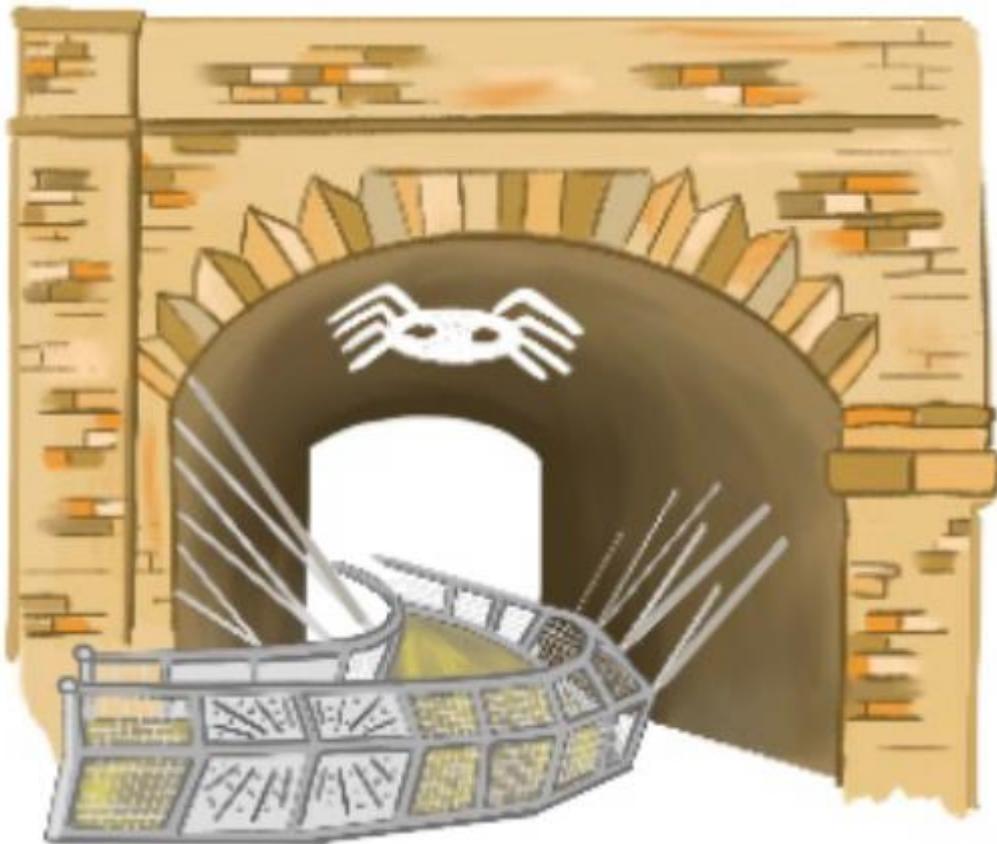
As the population of Sheffield continued to increase the situation deteriorated. In 1891 the Medical Officer of the City reported 'It would be hard to find in any town poorer conditions than are to be found in the centre of Sheffield. Nuisance and unsanitary conditions of every description abound. Diseases such as cholera and typhoid spread from privy middens and filthy unpaved courts into rubble sewers and contaminated water and waste flows down steep hill slopes into the river and streams.'

The urgency of the unsanitary conditions led authorities to create Sheffield's first sewage treatment facility Blackburn Meadows, located between Sheffield and Rotherham. This first step towards processing sewage rather than dumping it in the river was revolutionary and was a major milestone in dealing with this cause of water pollution.

No longer toilet-stops, nowadays Sheffield's bridges allow us to admire the River Don from above. On a warm sunny day the sparkling Don softly flows below the arches of Blonk Street Bridge, but in times of high rainfall and flood, these strong brick structures are forced to withstand the true power of the river. Along the river from here, another bridge can be seen - a huge viaduct. Suspended between the viaduct and the river is a metal walkway - the cobweb bridge, allowing you to pass under the arches and admire the bridge from below.

The Cobweb Bridge is located under the historic Wicker Arches railway viaduct near the disused Sheffield Victoria railway station. It was built as a key part of the Five Weirs Walk, a public path and cycle route created to give Sheffielders access to the Don so they could discover and enjoy the recovering river. The walk, which runs from Lady's Bridge in the city centre to the Meadowhall shopping Centre on the outskirts of Sheffield, was created by the Five Weirs Walk Trust; a handful of dedicated enthusiasts and was supported by statutory authorities, companies, charities and countless members of the public. Creating the walk was no small task, and required negotiations with numerous riparian landowners and leaseholders, the drawing up access agreements, the generation of public support, and much fundraising. In total it took over 20 years of hard work to create the walk with the last part finally being put in place in 2007.

The bridge itself was built in 2002, and was an important step as without it the Five Weirs Walk would have required a major diversion away from the river to circumvent the viaduct. Instead an innovative, 100 m long bridge was designed that hung suspended from the ceiling of the viaduct arch through which the River Don flows. The web of steel cables inspired the name of the bridge and makes the walker feel as though you are crossing the river on a giant spider's web.



The Cobweb Bridge allows people to negotiate the urban fabric of Sheffield, but in urban areas wildlife often needs a helping hand too. Greenspace along the Don provides an important stepping stone for nature, helping animals and plants to disperse across the landscape, despite the obstacles represented by the city. Next we hear of one such outpost of nature in the heart of industrial Sheffield.

My name is Paul Richards and I work for Sheffield and Rotherham Wildlife Trust and I am here on the edge of Attercliffe, at the Salmon Pastures Nature Reserve. It is just off to the side of the main path along the river, between Norfolk Bridge and Washford Bridge. The path through the reserve is marked by a wooden Wildlife Trust sign. There is also an old engraved stone dedication panel from the Salmon pastures

school that marks the location. The school was on the adjacent Warren Street, and briefly became an annexe of Parkwood college, but was demolished in 1997.



Salmon Pastures Nature Reserve is a fairly small reserve; in fact the smallest one managed by the wildlife Trust, but it is a nice little green refuge among the industrial buildings. It has been preserved because it is an important element of green space near the city centre in an otherwise built up environment and it offers a stepping stone for species as part of the green corridor along the river. This allows species to move from one area to another without getting isolated.

The site has a small area of woodland containing Birch, Alder, Hawthorn and Rowan with occasional regenerating Sycamore and Willow thrown into the mix. However, the site is mainly managed to encourage the grassland and tiny areas of heath that are found here. Lowland heath is an important and scarce habitat that supports a specific range of wildlife. The grassland includes species of plant that are indicative of acid grassland, such as Red Fescue and Wavy Hair Grass. There is also a lot of Knapweed and Bramble, providing nectar for the pollinating insects. Other plant species found in the dry soils here include the yellow bird's-foot-trefoil, bluebell and the red flower heads of Salad Burnet. The herbs and heathers attract a lot of insects. Several kinds of

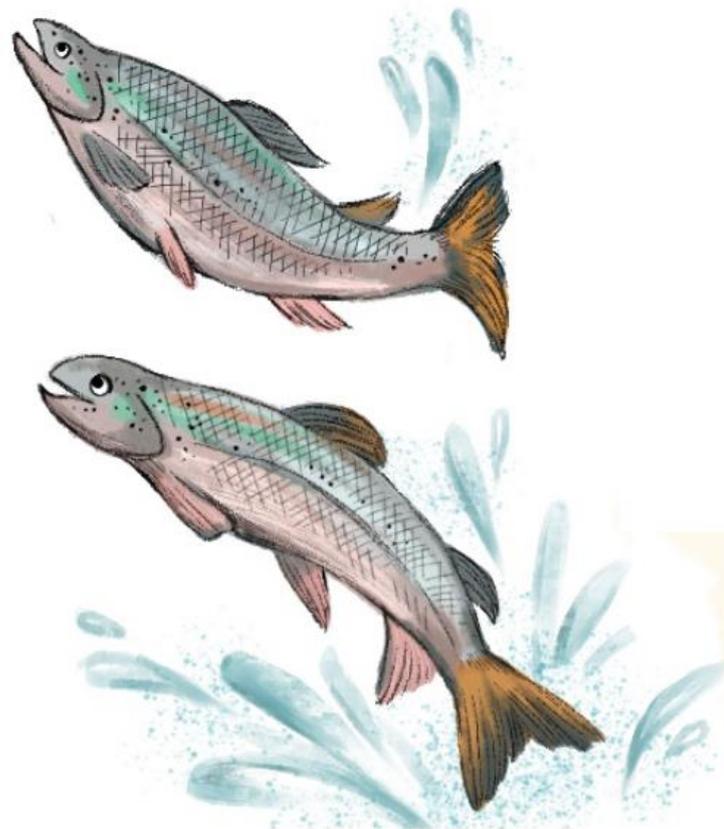
butterfly can be seen in the summer including the recently arrived Essex Skipper. There are also a good number of significant hoverfly species, dragonflies and moths. A variety of birds nest in the trees and feed on the plants and insects. I have also seen a family of foxes playing here.

Now that pollution levels have been controlled in the river, the invertebrates that rely on the water have thrived. Mayflies, Stoneflies and Caddis provide food for the Pied and Grey wagtails and their aquatic larvae, along with waterlice and other invertebrates in the river feed the fish, which in turn attract kingfishers and herons, and even otters!



The site has been known as Salmon Pastures for hundreds of years, but it is a long time since Salmon actually bred here. Salmon were once considered so prolific in this area, that it is said that apprentices in local factories had a clause in their contract limiting the number of times they would be fed Salmon for lunch! The chief cause of the Salmon's demise was the installation of numerous weirs in the river which prevented them from returning upstream to spawn. In recent years a number of 'Fish

passes' have been constructed along the river to enable the Salmon to travel past the weirs and further along the river. This has been successful, with the return of Salmon confirmed after an absence of more than two hundred years. In early 2019 the Environment Agency published a picture of a 31 inch (that's 79cm) Salmon caught nearby and in 2020 another picture was published of a Salmon caught further along the Don. The fish spend years in the sea, as far away as Iceland, feeding and fattening up for the journey back to the river. Fish passes make it easier for the weary Salmon to reach suitable areas to breed. Adult Salmon rarely feed in freshwater, so they need to conserve their energy. Once here, the cleaner water is now able to provide the invertebrate food to sustain the growing *young* Salmon, which are known as Fry, Parr and Smolt. As access to the full length of the river is provided for the migrating and returning fish there is every chance that you will be able to regularly see Salmon once again at Salmon Pastures.



As you visit the site, you can record any species that you see on the Nature Counts page at [wildsheffield.com/sightings](https://wildsheffield.com/sightings) where the information can be used to manage the site and conserve species.

One mile downstream of Salmon Pastures is another green oasis; the Attercliffe Municipal Cemetery which lies between the river Don and Attercliffe Road. The final resting place for many of Attercliffe's workers and residents, it is worth exploring this peaceful space. Further along the trail is the graveyard of Attercliffe Christ Church, which was badly damaged in the Sheffield Blitz and no longer stands. The old church hall can still be spotted. Hidden away nearby, and on occasion open to the public, lies another of Attercliffe's graveyards and secret green spaces, the Zion graveyard.



The Friends of Zion Graveyard protect this special place and research the people buried here, who reveal a picture of life in industrial Attercliffe. You can find cutlers, scissor makers, brass and iron-founders, a teacher, a chemist and a boot-maker here. It's also the final resting place of anti-slavery campaigner Mary Anne Rawson. In the 19th century Mary was a leading light in the Sheffield area for the anti-slavery campaign. She was a founding member in 1825 of the Sheffield Female Anti-Slavery Society, which campaigned for the freedom of the slaves and successfully boycotted goods produced by slaves, such as coffee and sugar.

These hallowed grounds have seen great changes to the surrounding Lower Don Valley. Two hundred years ago the valley was mostly rural, with three villages; Attercliffe, Carbrook and Darnall, which were prominent in the early days of Sheffield's metal industry. One hundred years later the massive growth of industry had transformed the whole Lower Don Valley into a great conurbation with back to back steelworks, kilns, mills, railways, a forest of chimneys, mounds of coal and waste materials, and rows of terrace housing for workers and their families. Imagine the air thick with smoke and fumes, and the sounds of machinery and workers banging and crashing.

Slum clearances and the decline of heavy industry ushered in a further transformation of the valley. Demolition of derelict works opened up large areas of brownfield land.

Communities relocated, and the buildings that served them like pubs and churches declined. Many of the large open areas have now been built on with modern developments such as the Meadowhall Shopping Centre, the Sheffield Arena and the Olympic Legacy Park. While a significant amount of heavy industry remains, the character of the Lower Don Valley has completely changed. The graveyards and cemeteries that remain, serve as a reminder of the communities that once lived here. Walking down busy Attercliffe road towards the canal, you may spot some of the older buildings, grand banks and victorian shop fronts - a reminder of a different time.



One the most famous films which features Sheffield is of course the comedy film *The Full Monty* filmed here in 1997. It features various parts of Sheffield including the canal in the opening scenes where Gaz and Dave get stuck on top of a sinking car alongside a bridge, which is actually the Bacon Lane Bridge in Attercliffe. My name is Lizzie Dealey and I work for the charity the Canal & River Trust which cares for this canal and I'm here to tell you a little bit more about the story of this waterway.

If you could choose a day to go back to in time along this canal, it would definitely be the 22nd February 1819, which was the grand opening of the brand new canal. It was such an important aspect of the city that a general holiday had been called and crowds of spectators came to see the very first boats arrive from Tinsley. There reportedly 60,000 people lining the banks of the canal, all the way up to the canal basin in the centre of the city. Back in February 2019 the Canal & River Trust organised a 200th birthday party for this canal and we had a fantastic, unseasonably sunny day with a flotilla of boats, including a brass band playing, travelling along this canal. It really was a great scene to see all the way from Bacon Lane Bridge, all the way as you walk towards Victoria Quays.



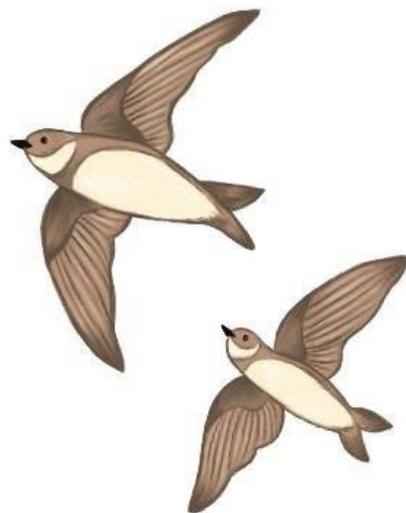
You're standing now in Victoria Quays which is the very end point of the Sheffield and Tinsley Canal. This canal is just under 4 miles long in total and it forms part of the Sheffield and South Yorkshire navigation which is the navigation waterway that runs between Sheffield and Keadby on the river Trent. Victoria Quays has a real blend of architectural styles and this is because in the latter part of the last century the canal basin was very derelict, there was a large restoration project in the early 1990's and this has led to the blend of styles you see today. There are a number of the original buildings that are now grade 2 listed around the Quays side and you can see the original terminal warehouse in the distance, the straddle warehouse which spans the waterway and a number of the curved terraces as you walk towards the city centre. Amongst the grade 2 listed buildings there are the archways which you can see running alongside one side of the Quays and these have got varying uses today; there's a cafe, a bar, there's also the Canal & River Trust information centre where we try to encourage people to learn more about this canal and to take part in looking after it and volunteering. It is also an important aspect of our school program so we can bring school groups down here to explain the importance of the waterways, both the historical importance and the importance they have today.

If you take a closer look at the bar within those arches, you will see it's called the "Dorothy Pax". The name comes after the last wooden keel, the type of boat that was used on the Sheffield and Tinsley Canal, and actually some of the reclaimed timber has been used within this bar.

I always think of this canal as a bit of a diamond in the rough. There are some really beautiful aspects of the canal, such as the mature trees lining the towpath and the reflections in the water as you walk along. It complements really beautifully with the industrial heritage all around the canal; but there are some anti-social aspects too. You will have no doubt noticed the graffiti and, unfortunately, litter as you walked along.

These are real challenges that the Canal & River Trust have to deal with specifically in urban locations. Fly-tipping and litter are real big problems for the charity and it costs over one million pounds every year to deal with these problems. One of the ways we are trying to brighten up and make our waterside spaces better is using street art, and now you'll be standing alongside a huge mural painted alongside the canal on a towpath wall in Attercliffe. This was created in 2019 to help mark the 200th anniversary of the canal and it was done in conjunction with the local arts collective called "Concrete Canvas" as well as funding from People's Postcode Lottery. That all helped to bring together 13 different street artists to create this beautiful display of pieces. The charity is really keen to continue on this work and involve more community groups in this creation of artwork and other projects to help brighten up and make the canal feel more loved, feel like a better place and more enjoyable to walk alongside. So, as you walk alongside today, do appreciate that this is a working progress and I really hope that you will be able to come in future years to watch how the canal improves and becomes a better place for everybody who uses it.

So thank you for being our travelling companion on this journey. The future of the Don looks bright, with the river an increasingly valued part of Sheffield. That's not to say there aren't many issues remaining, and indeed much more needs to be done to improve the river, but with iconic species like salmon returning, wildlife thriving, this is surely something to celebrate in these environmentally troubled times.



**The End**

This transcript is available to listen as a podcast on [Podbean](#) - <https://festivalofthemind.sheffield.ac.uk/2020/spiegeltent/salmon-of-steel-city-river-walk-podcast/>

There is an accompanying map of this walk - the “Salmon of Steel Trail” on the following page or download the trail map here - <https://mk0festivalofthw28id.kinstacdn.com/wp-content/uploads/sites/2/2020/09/FINAL-MAP-Salmon-of-Steel-Trail-2020.pdf>

Most **salmon** will migrate up the River Don in the months of October, November and December to breed. If successful young salmon may be seen in the river throughout the year, feeding and growing before they make the journey out to sea. Have you spotted a River Don salmon? Go to [www.dcr.org.uk](http://www.dcr.org.uk) and get in touch.

Why not follow the trail all the way to Sheffield Railway Station to see the **Salmon of Steel** sculpture, created by local Scrap Metal Artist Jason Heppenstall.

Download the **'Salmon of Steel'** podcast on Podbean and listen to it along the trail.

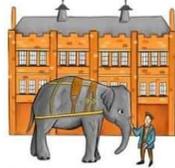
Illustrated by Sophie Carter.

**Full route** Approx 2 hours walk: - - - -  
**Short route** Approx 1 hour 30-minute walk: - - - -

The trail is accessible and cyclable, but take care on the unpaved surfaces and narrow paths.



**1** We start our journey at **Kelham Island Museum**. This building was once a powerhouse for Sheffield, generating electricity for the city's tram network. But, long before electricity, the river was used to fuel Sheffield. **Weirs** were built across the river to harness the power of the water and turn watermills, first milling corn but later used to power the machinery that helped to produce Sheffield's famous metal work. Look for the weir spanning the river and the 'Goit' that channels the water beside you, creating the Kelham 'island'.



**2** We've arrived at **Lady's Bridge** and another weir... but can you hear that rumbling sound? Sheffield steel was vital to the war effort during World War One, but with horses sent to the frontlines, who would pull the heavy loads of machinery and steel? The glazed orange building above you once housed an elephant called Lizzie, who did just this.



**6** But as the clock turns forward new life is breathed into the river. A sewage treatment works is built, polluters are fined for the damage caused, and as time passes industry declines. Can you believe that you are now standing on the site of an old industrial factory?

This is **Salmon Pastures**, now one of the wildest and most beautiful spots along the river. Riverflies emerge from the water, snapped up by greedy fish. The fish are caught themselves by hunting heron, kingfisher and even otter. Life has returned to the Don.



**5** **Splutter!** I can hardly breathe in this industrial fog and smoke. Decades of **pollution** and misuse meant that throughout the 1900s the Don was in a sorry state. Bright yellow in colour, it was filled with toxic chemicals, oils and the city's filth. Who will hold these polluters to account!

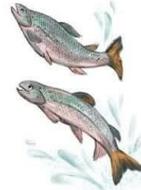


**3** Look across the river. **Sheffield Castle** once dominated the skyline here, defended from attackers by the river's power. Later, when the castle was in ruins, this spot became a bustling **market place**. The River Don was rich in salmon, trying to migrate upstream to their spawning grounds but blocked by the steep, stone weirs. Cone-shaped traps called 'hecks' were placed on weirs to catch them as they tried to leap over. So many were caught, salmon meat sold at the market for as little as two pence per kilogram.



**4** Hold your nose... a **Victorian toilet** hangs over the river just there. Booming industry meant booming populations of workers. Pollution from industry flowed into the river, but more damaging was the untreated sewage from the growing workforce. The river became almost devoid of life, but what is that growing there in the murk... a seedling? The river became tropically hot from the dumping of hot industrial water, providing the perfect conditions for fig seeds in the sewage to germinate, creating Sheffield's own forest of **fig trees**. Take the riverside footpath until you reach the **cobweb bridge**. This is the only route across to the other side so cross the cobweb carefully, avoiding the spider's watchful eyes above you.

TO THE RAILWAY STATION



**7** **SPLASH!** Could it be? A huge fish jumps and dives in the water below the weir. Can you see her? It's the stuff of legend - an **Atlantic Salmon**. One of the first few to return in two hundred years. She's followed her nose all the way from the ocean to our river, searching for the perfect conditions to lay her eggs. But this **HUGE** weir blocks her path. **SPLASH!** Water tumbles down a **fish pass** built especially for her to cross over. She swims up the watery escalator with ease and continues her migration.



**8** This peaceful **cemetery** is the last resting place for many of the mill and steel workers that lived along the Don during the industrial boom. Would they recognise the River Don today?

Imagine through the smoke and fog, a strong shire horse plodding up the

**9** **tow-path**, pulling a barge brimming with goods. The **canal** was built to help transport Sheffield's goods across the UK, to seaside ports and then across the world. Listen out for a train crossing the bridge ahead. The invention of the faster, powerful steam engine quickly replaced the canal boats. We'll follow the canal down to the **Victoria Quays** and the end of our journey.



© 2020 Don Catchment Rivers Trust. All Rights Reserved.

After decades of hard work building fish passes on the weirs along the River Don, salmon have been spotted in Sheffield's waters. But how do we monitor the return of salmon? Scientists at the University of Sheffield are researching how we can find traces of salmon **DNA** in samples of river water, this would reveal where they are in the rivers across the Don Catchment area. Perhaps you can help too and keep a watchful eye on the river?



Sheffield's waterways and the wildlife that depend on them are looked after and monitored by a range of organisations and volunteer groups including: Sheffield City Council, Don Catchment Rivers Trust, Yorkshire Water, Environment Agency, Canal & Rivers Trust, Blue Loop Troop, Five Weirs Walk Trust, Upper Don Trail Trust, River Stewardship Company, Sheffield and Rotherham Wildlife Trust, Sooty Natural History Society, The Wild Trout Trust, The Rothery Partnership, Sheffield Bird Study Group and many more. Several of these organisations (\*) have also worked to improve fish passage on the River Don.

# Salmon of Steel

## A trail through Sheffield





Salmon of Steel sculpture by Jason Heppenstall at Sheffield Station

## Further information:

### **Festival of the Mind's Salmon of Steel project**

<https://festivalofthemind.sheffield.ac.uk/2020/protopia/salmon-of-steel/>

### **University of Sheffield Salmon of Steel Research project**

[https://www.sheffield.ac.uk/molecol/deborah-dawson/salmon\\_of\\_steel](https://www.sheffield.ac.uk/molecol/deborah-dawson/salmon_of_steel)

### **Don Catchment Rivers Trust,**

working to protect and restore the rivers of the Don catchment.

<https://dcrt.org.uk/>

### **Don Catchment Rivers Trust – Salmon of Steel webpage**

<https://dcrt.org.uk/salmon-of-steel>

### **Don Catchment Rivers Trust**

Video - The historical significance of salmon in Sheffield by Sally Hyslop

<https://www.youtube.com/watch?v=iK5MiKd3uBE>

### **Festival of the Mind – Salmon of Steel**

<https://festivalofthemind.sheffield.ac.uk/2020/protopia/salmon-of-steel/>

### **Festival of the Mind – The Salmon's story podcast**

<https://festivalofthemind.sheffield.ac.uk/2020/spiegeltent/salmon-of-steel-story-podcast/>

### **Don Catchment Rivers Trust –**

Video - Building the Hadfield weir fish pass, Sheffield

<https://www.youtube.com/watch?v=nXSaIKCiHG4>

### **Horses, Elephants and Mushy Peas**

<https://hhbs.org.uk/2019/03/31/horses-elephants-and-mushy-peas/>

### **Sheffield's Women of Steel**

<http://www.storyingsheffield.com/project/women-of-steel/>

### **The Sheffield Castle Dig by Professor John Moreland**

<https://www.sheffield.ac.uk/archaeology/sheffield-castle/sheffield-castle-dig-video>

### **Sheffield Castlegate: Virtual model of castle created (BBC News)**

<https://www.bbc.co.uk/news/uk-england-south-yorkshire-45587064>

### **The University of Sheffield's Castlegate webpage**

<https://www.sheffield.ac.uk/archaeology/sheffield-castle>

This highlights the Department of Archaeology's involvement in the archaeology of the castle site, and its role in efforts to regenerate Castlegate.

### **Friends of Sheffield Castle**

<http://friendsofsheffieldcastle.org.uk/information/a-history/>

The website of the Friends of Sheffield Castle, a pressure group working with the University and the City Council to ensure that the heritage of the castle site is at the heart of future regeneration, and to secure access to the castle remains for the Sheffield, and wider, public -

<http://friendsofsheffieldcastle.org.uk>

### **Wessex Archaeology**

The website of Wessex Archaeology, detailing their excavations on the site in 2018, and providing access to their assessment reports - [https://www.wessexarch.co.uk/our-](https://www.wessexarch.co.uk/our-work/sheffield-castle)

[work/sheffield-castle](https://www.wessexarch.co.uk/our-work/sheffield-castle)

### ***Book – “Sheffield Castle: Archives, Archaeology, Regeneration, 1927–2018”***

**John Moreland and Dawn Hadley with Ashley Tuck and Milica Rajic**

This book on the excavations carried out on the site of Sheffield Castle between 1927 and 2018, and on the role of heritage in efforts (past and present) to regenerate Castlegate, will be published by White Rose University Press in late August 2020. It will be free to download from WRUP's website - though hardback copies can also be purchased. This is WRUPs

website - <https://universitypress.whiterose.ac.uk/site/catalogue/>

### **Sheffield and Rotherham Wildlife Trust**

<https://www.wildsheffield.com/>

### **Report your wildlife sightings:**

<https://www.wildsheffield.com/wildlife/wildlife-conservation/more-data-for-nature/sightings/>

### **Friends of Zion Graveyard**

<http://www.ziongraveyard.btck.co.uk/>

### **Canal & River Trust**

[www.canalrivertrust.org.uk](http://www.canalrivertrust.org.uk)

### **Sign up for the Canal & River Trust e-newsletter**

<https://canalrivertrust.org.uk/newsletter>

**Become a Canal & River Trust fan**

<https://www.facebook.com/canalrivertrust>

**Follow the Canal & River Trust on Twitter**

<https://twitter.com/canalrivertrust>

**Follow the Canal & River Trust on Instagram**

<https://www.instagram.com/canalrivertrust>

**Don Catchment Rivers Trust –**

Video - 5 Minute History of Boats on the Don by Rachel Walker

<https://www.youtube.com/watch?v=oXA4SKK00YQ>

**Don Catchment Rivers Trust –**

Video - 5 Minute History of the Dutch River by Rachel Walker

[https://www.youtube.com/watch?v=cSM\\_FipNGGM](https://www.youtube.com/watch?v=cSM_FipNGGM)



The  
University  
Of  
Sheffield.



