

# RIPARIAN EXAMINER



THE NEWSLETTER OF THE WYRE RIVERS TRUST  
AND THE WYRE WATERS CATCHMENT PARTNERSHIP

ISSUE 02

# Foreword

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Phil Robson– Chairman, Wyre Rivers Trust & Wyre Waters Catchment Partnership

I am delighted that our Wyre River Trust and Wyre Waters Catchment Partnership have been so busy as to need a second edition of our newsletter.

With the help of our many volunteers and partners the trust has been able to secure several new contracts via competitive bidding.

This means that together with our existing funding support the Trust has for the first time a live funded work programme taking us to 2018 and beyond.

We are delighted to welcome our second full-time scientist to the team, Dr. Melanie Hartley joined us on the 1<sup>st</sup> of August 2016 and will work for Tom Myerscough who becomes Wyre Rivers Trust Programme Manager.

We are now affiliates of a North-West Region wide EU project that aims to demonstrate how a whole river basin district can deliver ecological improvements to our rivers over the next 10 years.

This exciting development means that the River Wyre will get the attention and funding it deserves to raise the quality of the entire riverine system from Abbeystead to the Irish Sea, at long last we will have a plan for the catchments improvement over the long term using the EU Water Framework directive to monitor our improvements.

In the rest of this Newsletter you will see typical projects that over time will add to the improved ecology in our system, which benefits all the Flora and Fauna, not least of which is to encourage greater success for our migratory fish, which are so threatened by centuries of decline in Britain's aquatic environments.

Thank you very much for all the many free hours given over by our many friends and volunteers. We are making a difference!

Phil Robson



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Wyre River Trust – Registered Charity Number: 1161776

Registered in England, Company Number: 8008486.

Registered Office - Factors House, Back Lane, Higher Whitley, Warrington, WA4 4PX

**Contact us at - [www.wyrivertrust.org](http://www.wyrivertrust.org)**

Our projects are supported by a wide variety of organisations including; The Environment Agency, United Utilities, The Forest of Bowland AONB, Wyre Borough Council, The Wild Trout Trust, The Lancashire Environmental Fund, LOVEmyBEACH and our highly valued volunteers

We would like to thank them all for their continued support.

# In Brief

## 2016 - Wyre Rivers Trust's biggest year yet

2016 saw the Wyre Rivers Trust sign up to its largest programme of work ever as projects were delivered with the support of United Utilities, the Environment Agency, Lancashire Environment Fund and the European Union. The result of which is that the trust has obtained its second employee, Dr. Melanie Hartley.

## Monitoring and Research

The trust continued its monitoring and research throughout 2016. Our primary focus for monitoring was Woodplumpton Brook, we teamed up with students from Lancaster University to monitor invertebrate populations in the brook before and after the completion of the Wyre Riparian Restoration Initiative.

## Education and Engagement

In 2016 the trust delivered a number of educational walks as it continued to engage the general public and stakeholders alike. Our CPAF project (Page 6) was visited by over 40 delegates who were in attendance at the River Restoration Centre Annual Conference, held at the Imperial Hotel, Blackpool. The trust has also continued to support local landowners and farmers by providing advice and guidance on a wide range of issues.

## Collaboration

Through links formed by the Wyre Waters Catchment Partnership the trust has continued to collaborate with a wide range of partners, these include; Lancaster University, Wild Trout Trust, Environment Agency, United Utilities, Associated British Ports, Wyre Borough Council and LOVEmyBEACH.

# Expansion

## **Dr Melanie Hartley - Tidal Wyre Project Officer**

### Profile

My role as Tidal Wyre Project Officer includes the incredibly rewarding role of working with, and building relationships with participating farms, to ensure that the works planned as part of the project are achieved to a good standard, but also to develop partnerships for the future benefit of watercourses in the Wyre catchment. I administer project documentation and am responsible for collecting evidence of works completion and reporting to the project sponsors. Additionally, I am responsible for monitoring improvements to water quality and the riparian habitat, also to demonstrate the beneficial impact of the works undertaken, ultimately leading to an improvement in water quality.

My background is Ecology, my degree is in Environmental Biology and my PhD investigated the interactions between deer browsing and soil carbon cycling in a naturally regenerating forest. Since then I have been involved in a variety of research projects, from saltmarsh biodiversity to the impacts of storm Desmond on agricultural and upland plant communities. Alongside research I tutored and supported the academics with their teaching at Lancaster Environment Centre, and participated in a variety of outreach and engagement activities. I joined the trust to take on more of an applied role, using my understanding of research to make real changes to improve the environment. I have always wanted to work in aquatic environments, and hope that with the trust I will experience this from source to sea. My most favourite habitat is the Saltmarsh, and I love to take the dogs walking on Morecambe Bay. I like to swim to keep the mind focused, and although a cliché, I really love to spend time with my friends and family.

# Wyre Riparian Restoration Initiative

Woodplumpton Brook



Left - Erosion scar, January 2016

Right - Restored area, August 2016, in flood

Woodplumpton Brook is a short watercourse which rises to the south of Longridge on the southernmost boundary of the Wyre Catchment. Over its course of 16.5 kilometres the brook faces a great deal of issues which include: barriers to fish passage, intensive agriculture, diffuse and point source pollution and canalisation.

In March 2015, the Environment Agency opened the Catchment Partnership Action Fund to bids which aimed to improve watercourses with regard to WFD Status. As host of the Wyre Waters Catchment Partnership the Wyre Rivers Trust applied for funding to reduce diffuse pollution on a large reach of Woodplumpton Brook.

From the initial site visits it was clear that the reach of Woodplumpton Brook in question was a target for some restoration works which would focus upon reducing the amount of sediment and diffuse pollution which enters the watercourse at this location. We also developed a monitoring strategy which focused upon water chemistry and the diversity of aquatic invertebrates which were present within the brook at this location.

As part of the restoration initiative it was decided that stock-proof fencing should be installed along the brook to form a buffer zone and to improve the flora and fauna of the riparian zone. We then identified a number of eroding banks and devised a plan to use soft-engineering techniques to increase bank stability and protect them from further erosion.



Left - Willow branches and brash tethered to bank - Right - Erosion scar backfilled and graded.

Although soft-engineering (the use of natural materials to reduce erosion and protect river banks) may seem like a time consuming method of bank protection it is actually one of the most sustainable methods used in river restoration, for, the willow which sprouts from brash and branches will provide protection to the soils of the river bank for as long as it is present. It will also work to dissipate and refract the energy of the brook therefore reducing the erosive power of flood waters and preventing the loss of soils where it has been utilised. The willow trees will also form excellent habitat for a wide range of terrestrial and aquatic species as well as providing shade for the watercourse.



Above - The deposition of gravels and creation of a riffle around an area of bank restoration

# Tidal Wyre

A project supported by United Utilities, delivered in conjunction with the Environment Agency and Ribble Rivers Trust.

Since 2014 the Wyre Rivers Trust has been working to develop a large project which focuses on the impact of water pollution from agriculture and methods which can be employed to reduce it. The first phase of the project focused upon the development of a prioritisation model which would help us identify where the project should be delivered within the existing project boundary. This was achieved through the use of GIS (Geographical Information System), by taking a wide range of datasets and combining them we created a prioritisation matrix which assigns each 100m<sup>2</sup> in the project area a score based on its perceived risk to water quality, this can then be displayed in a manner which shows the perceived risk in a colourised map, where a darker colour indicates a higher risk and a lighter colour indicates a lower risk to water quality. This map was used to inform a letter drop which invited farmers to contact us if they were interested in a free, confidential farm visit.

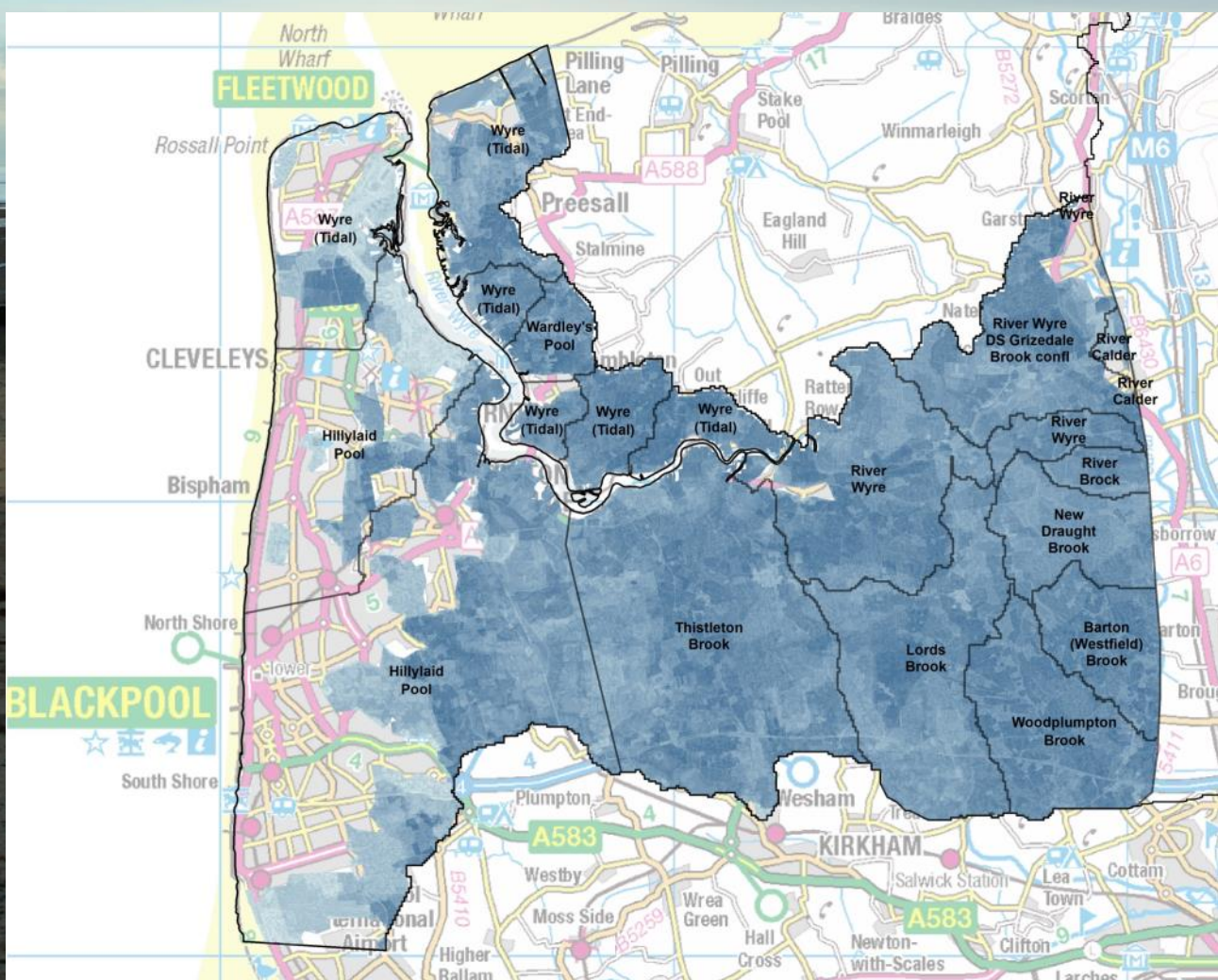


Figure 1 - Tidal Wyre Project Area Prioritisation Map.

Contains Ordnance Survey data © Crown copyright and database right 2014, Environment Agency 2014 & Natural England 2014.



As part of the farm visit we identified areas within both the farm yard and the wider holing which could be improved to reduce the amount of pollution which enters watercourses within the project area and provide the farmer with a day-to-day cost saving. The interventions which were identified cover a wide range of issues but most commonly the aims were to fence watercourses, separate clean and dirty water, reduce poaching around gateways and drinking troughs and the installation of guttering on farm buildings. Interventions were identified and costed for the whole farm, these were then compiled into a detailed PINPOINT report (below) which was passed to the farmer. Using the information gathered in the reports we then built a delivery proposal which aimed to provide support for each of the farms which had agreed to a visit from the trust.

**PINPOINT**  
Rivers Trusts and Farmers tackling water pollution

**A clear solution for farmers**  
RIVERS TRUSTS AND FARMERS

**Farm Resource Plan**

Report on: Cow Farm  
Sheep Lane  
Goatshire  
CH1C 4EN

Contact: Mr A Farmer

Grid Reference: SD000000

Report No: 01

Report Date: 01/01/2015

Sheet 1 of 4

**Opportunity 7**

**PINPOINT**  
Rivers Trusts and Farmers tackling water pollution

**Hardcore gateways and watertroughs**

**Recommended Action** Consider hardcore gateways and watertroughs

**Financial Savings and Environmental Gain** Improved riparian habitat.  
Reduced input of faecal matter  
Reduced poaching and lameness in livestock

Refer to Pinpoint Information Sheets 12.0 Farm access

Information sheets are available online at [www.associationofrivertrusts.org.uk/pinpoint/info\\_sheets.html](http://www.associationofrivertrusts.org.uk/pinpoint/info_sheets.html)

Livestock excretion while drinking or congregating can potentially contaminate water with large numbers of faecal microorganisms.  
Make sure current and new water troughs are located away from watercourse (they should be at least 10m away from a watercourse), also consider moving trough if it is close proximity to a pathway to a watercourse (ie. road or track).  
Consider storing out the water trough and gateways to reduce faecal matter and sediment run-off.

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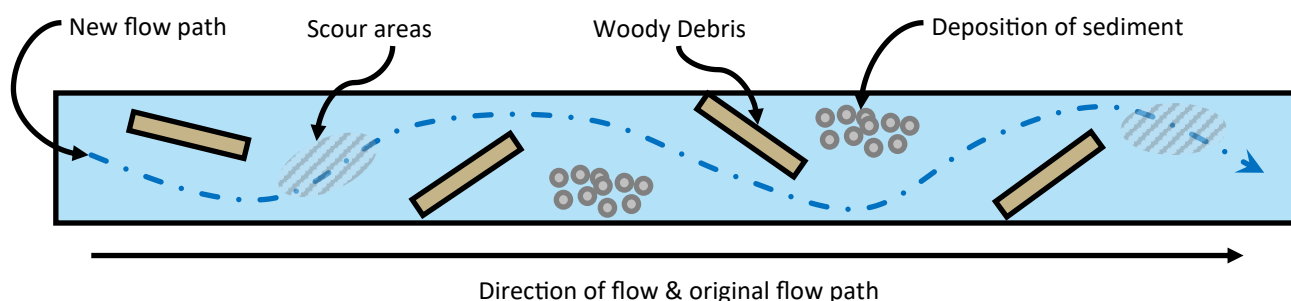
During 2016 the trust received confirmation that the delivery phase of the Tidal Wyre project was going ahead. From then on the trust has been working in earnest to begin the delivery phase, with our Tidal Wyre Project officer Melanie Hartley moving into post on the 1st of August. Since then the trust has been working with the farms selected for the project to develop project plans and begin delivery of the interventions. Furthermore we have recently commenced our monitoring activities for this project with a focus on the numbers of faecal bacteria which are present within the watercourses associated with the project.

# Fisheries Improvement Fund

Projects supported by the Environment Agency through the Fisheries Improvement Fund

## Street Brook and Woodplumpton Brook

Although very different in their form, location and biodiversity, Street Brook and Woodplumpton Brook have a number of very similar issues. By working in conjunction with Jon Grey at the Wild Trout Trust we identified a number of low cost projects to improve both habitat, water quality and biodiversity. The beauty of low cost interventions is that they are both simple and effective. On both of the watercourses concerned there were long sections of straight canalised watercourse, this leads to low biodiversity, poor retention of sediment and poor geomorphology. To address the aforementioned issue, sinuosity had to be introduced into already constrained watercourses, this is achieved by installing large woody debris into the channel deflecting high flows (in Street Brook) and low flows (in Woodplumpton Brook), thus causing scour and the deposition of sediment at various points within the channel and creating a more sinuous channel when the watercourse is at low levels.



To make further improvements on Woodplumpton Brook we also notched a small weir, By removing a central portion of the weir we will improve habitat connectivity and reduce the effects of the impoundment of water on this section of the brook. It is hoped that the improvements will facilitate an increase in biodiversity in the brook through the creation of varied biotopes (habitat types) in areas which previously supported few species due to the impacts of human management of the brook. In 2017 we plan to install a series of baffles on a culvert which sits beneath School Lane, this will also increase habitat connectivity by facilitating fish passage over a structure which can prove difficult to traverse for smaller fish species.

*Biotope - the region of a habitat associated with a particular ecological community.*





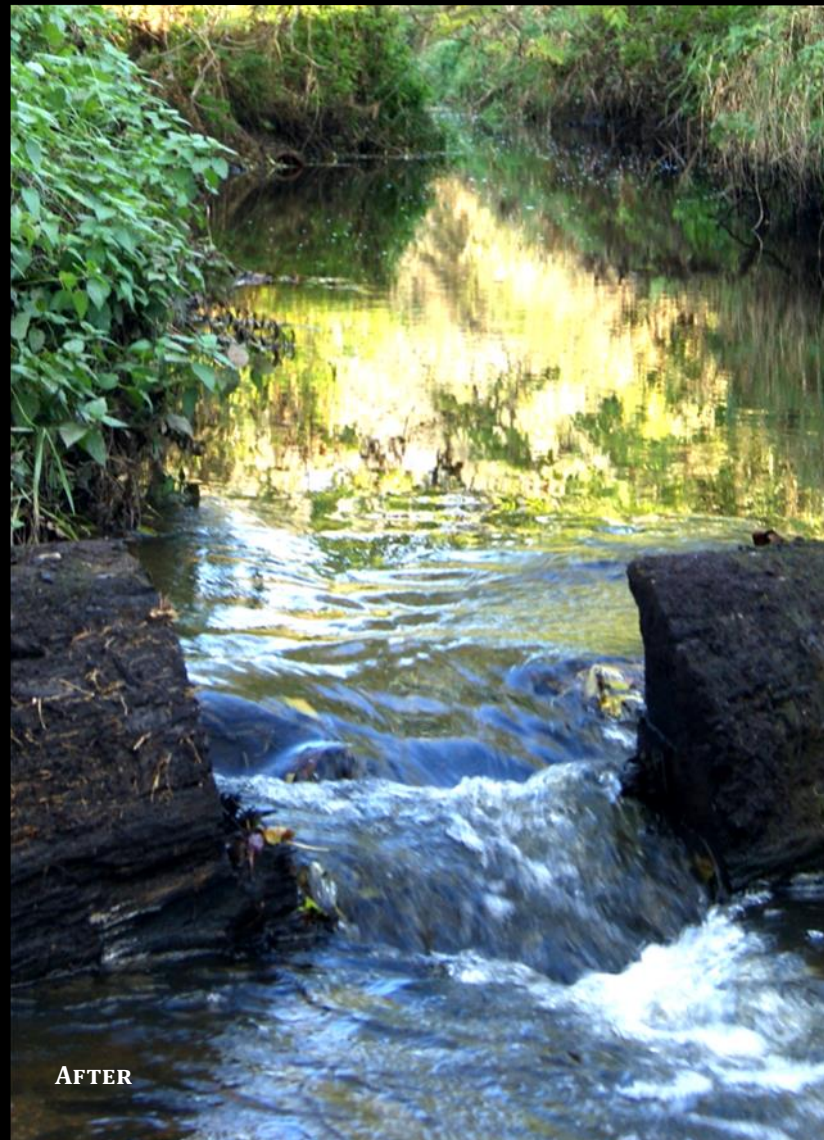
BEFORE



AFTER



BEFORE



AFTER

# Wyre Waters Catchment Partnership

*2016 proved to be another busy year for the  
Wyre Waters Catchment Partnership*

- The creation of an Estuary Group has brought a wide range of industrial and charitable partners together.
- The Partnership has delivered 12 beach cleans at Knott End, it has also supported Beach and Estuary Cleans delivered by Wyre Borough Council.
- The delivery of a celebration event in support of World Oceans Day at Fleetwood Marina.
- A lecture at Rossall Tower which focused upon the Flora and Fauna of Morecambe Bay and the food webs which exist in the largest intertidal area in the UK.
- The delivery of three engagement walks across the Wyre Catchment, these included an Invasive Non Native Species Walk at Scorton and a Saltmarsh Saunter at The Wyre Estuary Country Park.

## Looking Forward

- The Catchment Partnership will continue to build upon its recent successes, if you would like to be involved in the partnership please get in touch with us.

*The dates for the Knott End Beach Clean events which are taking place in 2017 are listed on the final page of this newsletter*

# World Oceans Day

Jean Wilson MBE

Following on from the success of the BioBlitz held at Stanah Country Park and supported by the Royal Society of Biology Grant Scheme in 2015, it was proposed to celebrate the life in Fleetwood Marina in 2016, just a short distance down river from Stanah.

Fleetwood Marina is juxtaposed to Freeport Fleetwood, a major shopping outlet in the North West with a weekly footfall of over 10,000, an ideal site to show the biodiversity of the life in Fleetwood Marina to the general public and highlight the role of the Wyre Waters Catchment Partnership. A series of banners emblazoned with the WWCP logo, were produced that now adorn the barrier between the shopping centre and the marina.



Representatives and members of the Wyre Waters Catchment Partnership at the unveiling of the World Oceans Day Banners

The 7 banners sponsored by the Royal Society of Biology identified the Life and Food Web in the Marina. The banners were appropriately unveiled by Captain Cod! Fleetwood Town Football Club's Mascot on June 6<sup>th</sup>, World Ocean Day which is recognised globally. On the Friday and Saturday of that week, there followed a collaborative activity, held at Freeport and involving the RSB, Wyre Rivers Trust, Wyre Borough Council, Love My Beach, Association

of British Ports, NPL, RSPB, Lancashire Wildlife Trust, Cumbria Wildlife Trust, SeaLife Blackpool, Marine Conservation Society, Natural England and Blackpool and the Fylde College. The contributors set up their displays with accompanying activities, the RSB members trawled the marina collecting species for exhibition.



*Newsflash* - The BioBlitz held in 2015 at the Wyre Estuary Country Park has recently received a Green Flag Award in the Special Innovation Category.

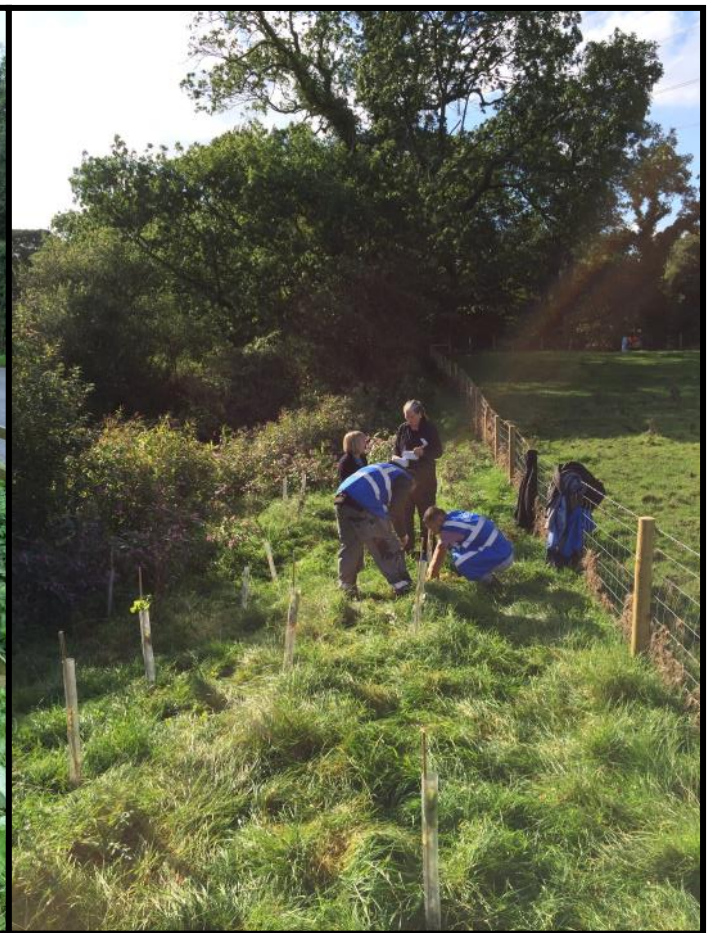
# The Ways Forward

Project supported by the Lancashire Environmental Fund.

Working in conjunction with the Lune Rivers Trust we have delivered a small project which focused upon the Millennium Way at Scorton and the Millenium Path at Lancaster . With the help of around 25 students from Lancaster and Morecambe College a number of mini-projects were delivered in both the Lune and the Wyre. The work took place in a “week of action” between the 3rd and 7th of October, over three days students were asked to deliver a series of practical tasks, on the Millennium Way at Scorton. This included the replacement of a section of path-edging which had become rotten, and then they planted 250 trees in an area which had recently been fenced by the Trust on the banks of the Wyre and Park Brook. On the final day of practical activity the students made bird and bat boxes to be installed at a later date. Throughout the “week of action” the students were educated about the issues which prevail on the river Wyre, the lifeforms that are found in the river and how low cost projects can improve both aquatic and terrestrial environments.



**Above** - Students replacing path edging on the Millenium Way which runs alongside the River Wyre.



**Above** - A wide variety of tree species planted in a riparian buffer zone alongside Park Brook.

# Natural Course

Our Water. Our Future.

As host of the Wyre Waters Catchment Partnership, the Wyre Rivers Trust was invited to act as an affiliate as part of the Natural Course project which commenced in October 2015. The project has supported the delivery of partnership objectives in 2016, allowing us to engage with new audiences in the Estuarine area of our catchment.

As part of the project we hope to address fish passage issues within the Wyre Catchment and develop an integrated catchment plan for the Wyre catchment which focuses upon each of the major issues affecting our catchment.

Natural Course will build capacity to protect and improve our North West water environment, now and for the future.

78% of our rivers in North West England are failing to meet a 'good ecological status' and many solutions are too expensive to implement. Organisations from across North West England are working together to seek cost-effective solutions to improving water quality across urban and rural landscapes, sharing best practice across the UK and Europe.

Natural Course will:

- Test and inform best practice in achieving UK and EU legislation in water quality.
- Use the North West River Basin as a flagship project and share best practice with the UK and Europe.
- Make better use of resources, share ownership of complex issues, reduce barriers and maximise outcomes, through a collaborative approach of organisations from public, private and third sector.

Natural Course is an EU funded LIFE Integrated Project, that will run for 10 years (subject to funding) to improve and protect the water quality of the North West.



# Events Calendar 2017

The Wyre Rivers Trust and Wyre Waters Catchment Partnership will be hosting a number of events in 2016.

Our website will be updated with information on these events as it becomes available.

## **Introduction to Ecology - 10:00 -15:30**

April 20th - The Muddy Shore, Knott End.

May 25th - The Saltmarsh, Stanah.

June 15th - Sand Dunes, Fleetwood.

July 20th - Freshwater Ecology, Scorton.

## **River Walks**

**Thursday 15th of June, 10:00 - 12:30 - Invasive Non-Native Species**

*A short walk around the watercourses which surround the Wyre at Scorton. Stops will be made to discuss the riparian habitat and the variety of issues which face it.*

## **Beach Cleans**

**Knott End - (10:00 - 12:00)** - April 11th, May 2nd, June 13th, July 18th, Aug 1st, Sept 12th, Oct 10th, Nov 14th & Dec 12th.

**Various Locations - (10:30 - 12:30)** - March 15th, May 17th, July 19th, September 27th & 29th November.

## **Estuary Cleans**

**Various Locations - (10:30 - 12:30)** - February 22nd, April 19th, June 21st, August 16th, 25th October & 13th December.

**Please check our website for further information on any of the events listed on this page.**