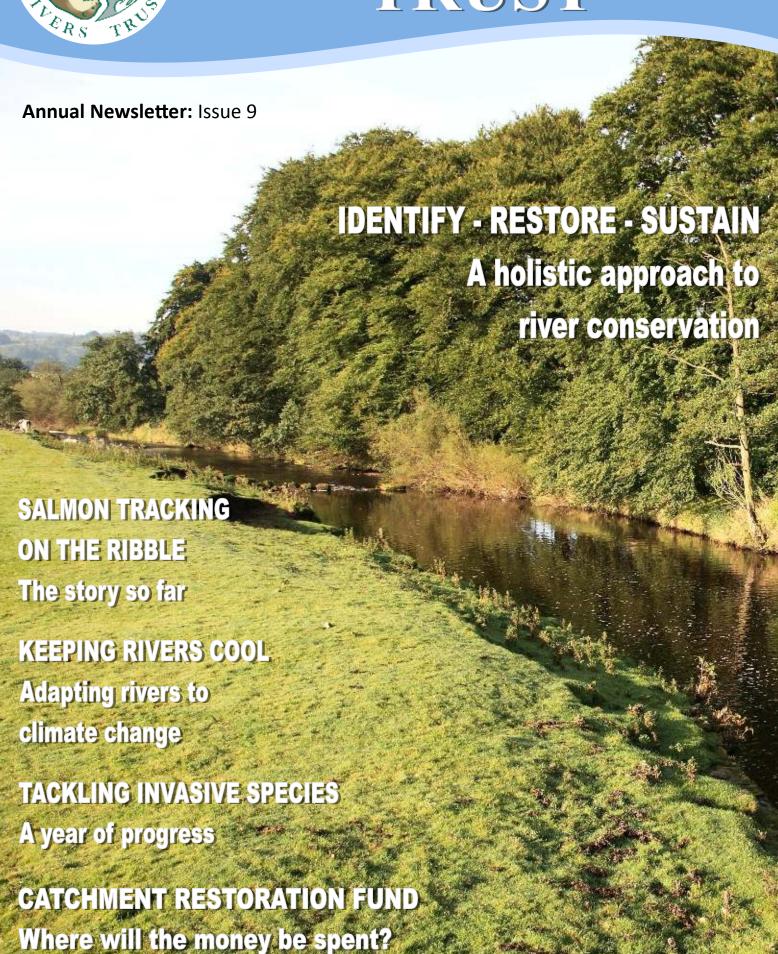


# RIBBLE RIVERS' T'RUST'



# **CONTENTS**

## ON THE COVER

**IDENTIFY - RESTORE - SUSTAIN** 

Trust director Jack Spees explains RRT's holistic approach to river conservation

SALMON TRACKING

Fisheries scientist Gareth Jones reports on the findings of the Ribble spring salmon tracking

INVASIVE SPECIES

Adam Walmsley provides a summary of the progress in tackling invasive non-native species

KEEPING RIVERS COOL

How we plan to adapt our rivers and streams to future climate change

3

14

#### PROJECT UPDATES

where the money will go

**CATCHMENT RESTORATION FUND** 

Details on our 3-year funding from Defra and

**ELECTROFISHING SURVEYS** 4 6 RIVERFLY MONITORING RIVER WALKOVER SURVEYS RIVER IMPROVEMENT FUND PROJECTS 10 12 CAM AND GAYLE BECKS STOCK BECK **URBAN RIVER ENHANCEMENT SCHEME** 16 RIBBLE LIFE 17 ANGLING PASSPORT 18 **SUPPORTERS** 19

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Editor: Catherine Birtwistle
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Charity number: 1070672 Company number: 3498691



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Vince Edmondson (Vice Chairman)
Alan Rowntree (Treasurer)
Dominic Bradley
Chris Haworth
Mike Horner
Harvey Marchbank
Dave Wilmot



# **CHAIRMAN'S REPORT**

#### PHILIP LORD COMMENTS ON ANOTHER SUCCESSFUL YEAR AT THE TRUST

Project funding bids have been very successful this year. The Trust has 10 great staff with all the skills to drive the Trust forward and improve the Ribble Catchment for current and future generations. The success of funding bids has been opposed by the weather, which from June onwards has caused us many problems, and is continuing to do so as I write this in December. We have projects that have to be completed by 31<sup>st</sup> March 2013 and we need a rapid improvement in the weather, much work has gone into securing these projects and it would be terrible not to see them delivered.

This year has seen an increase in volunteering in the catchment. This has allowed so many more improvements to be made, and has an additional benefit in that all the volunteer hours that have been put in adds value to our funding bids. But quite simply the more help we get, the better the river will be.

Consistent monitoring and data gathering is the oxygen behind our management of the rivers. We need long sets of data built up over many years to focus efforts and resources on the actions that will bring about the most improvement to the catchment. Our targets are;

- To connect all of our rivers and streams by removing man-made barriers
- To improve the natural gravels
- To create better in-channel habitat for fish and other river wildlife
- To have good water quality throughout the catchment

These are the factors that will determine the health of the Ribble Catchment and all of its native wildlife that we all cherish and enjoy.

# **DIRECTOR'S REPORT**

# JACK SPEES EXPLAINS THE "IDENTIFY - RESTORE - SUSTAIN" APPROACH

The success of the Trust in delivering projects in 2012 and securing funding for projects into 2013 - and some projects as far as spring 2015 - has largely come about because of the dedication and hard work of the Trust's staff. The team itself has a wide range of skills from River Ecology and Planning, to Agriculture and Civil Engineering. This has meant that we have been able to adjust our approach to be truly catchment based but more importantly, truly holistic - addressing the three main issues of water quality, habitat quality and habitat connectivity.

We have now been able to formalised our "IDENTIFY - RESTORE - SUSTAIN"

strategy, which is a simple, common sense approach that forms the basis of all successful conservation projects, be it on land or in water, by ensuring that each stage in the improvement of the catchment is seamlessly joined.

**IDENTIFY:** We have been identifying the issues on the catchment for many years, but more recently we have worked with partners and stakeholders through the Ribble Life project to expand this list. To address every issue is our goal, but with limited resources, we must focus effort on those issues that are most significant, i.e. we must prioritise. To that end, we are collating 240 different datasets that have

been provided by various stakeholders to try and produce a prioritised set of works that not only *we* can embark on, but all of the stakeholders in the catchment.

**RESTORE:** We prefer to see issues as "opportunities" to restore or improve, rather than issues, not just the river but the catchment in general. By generating a map of what work is needed where (such as fencing and tree planting, weir removals and changes in land management), and also providing details of the multiple objectives it will help achieve, we hope that the amount of work being undertaken to restore and improve the catchment by everyone will increase.

**SUSTAIN:** By encouraging others to get involved in as much of this process as possible, engaging with them on the benefits that clean, healthy rivers present and involving them in some of the more simple activities that can help improve and protect our catchment, we hope to generate a sense of ownership and pride in our rivers and streams. This will ensure that the improvements that are made are continued into the future for current and future generations to enjoy.

Our newsletter is packed with examples of this process in action, from the weir and habitat schemes completed in 2012, to the engagement and proposed works in Burnley. I hope you enjoy the read, and are inspired to sign up to help improve our catchment in any way you can!



# **ELECTROFISHING REPORT** by Gareth Jones

Electrofishing surveys are one of the most important datasets that the Trust collects. The presence of a good juvenile salmonid population is indicative of how healthy a particular river or stream is. By carrying out these surveys annually, we can identify the watercourses that are lacking in fish populations and focus our efforts there. The electrofishing datasets also provide a valuable source of 'before and after' data, which demonstrates how effective a project has been in raising the salmonid population and thus the ecological status of that section of river.

The wet weather has benefitted the catchment's population of juvenile salmonids in 2012. An increase in the numbers and growth of fry in our local becks has occurred in the survey sites we were able to revisit. The summer has proven to be frustrating with many days postponed or cancelled due to high river levels and discolouration of the water. On the plus side, we have involved more (academic and angler) volunteers than ever before to complete our full allocation of Calder sites and with good coverage of the Hodder and mid-Ribble systems. As a result, we have fished into mid-October thanks to an extension to our Environment Agency (EA) consent. In a normal year, we would complete our

task by the end of September. To make best of the conditions, we prioritised the monitoring of the sites where the Trust has completed work or will be targeting in the near future. This is with the aim of building a picture of their development in the years to come and hopefully a boost in fry numbers will materialise.

Many becks that were running low (or even dry) last year have fished surprisingly well across the whole catchment, with the extra water providing more available habitat to young fish. The Calder Catchment has notably yielded greater numbers of trout fry than last year, although plenty of scope remains for improvement, most notably in Burnley, Colne Water and Catlow Brook. An absence of salmon fry on the Calder beyond Sabden Brook continues and the aforementioned areas underperform by comparison to their headwaters. Throughout the Hodder Catchment, there was a good return of salmon fry, particularly in the main river sites, with improved numbers of trout fry further up the system in the headwaters. The EA has provided their data from their 'Restoring Sustainable Abstraction' project at the top of the Langden and Dunsop systems. Our thanks are offered to the EA for sharing this information. Again, the Hodder has



proved to be our most productive subcatchment and has fished consistently. Unfortunately, our coverage of the Ribble has not reached our earlier expectations. Swanside and Long Preston Becks have again represented the most productive areas.

Our native white-clawed crayfish appear to have had a good year, arriving in a handful of new locations that we had not previously seen them. Eels have also benefitted. Proportionally more sites to last year have contained eels. In a five-minute long survey, 11 eels were discovered in a beck only 3m wide! The location was typified by exposed tree roots in the banks in a reach with reduced water flow. Given their rare status, it is worth noting that when we capture eels. we are quick to remove them from our survey site and quickly return them to the river.

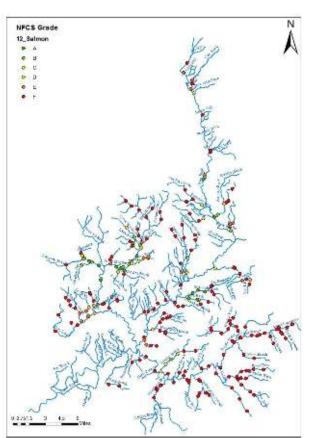
In 2012, we saw very few coarse fish

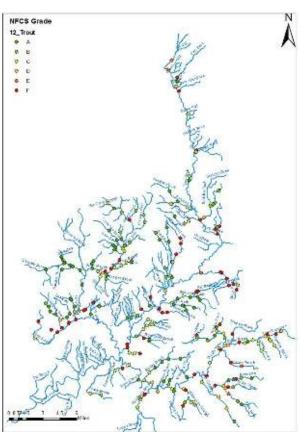
species,

with

the

exception of minnows. One site yielded 249 minnows in a fiveminute survey period. Whilst our survey methodology does not specifically cover species, coarse inevitably we discover them in the lower areas of the Ribble, an area we unfortunately had to omit this year. We will be keen to readdress this in the coming year when we aim to expand the programme survev hope summer arrives with us this time! With 5 years' worth of data, we will now start looking at longer term population trends.





# SALMON TRACKING ON THE RIBBLE by Gareth Jones



Keeping on top of our tagged fish has undoubtedly been a big effort, with over 2 million location points gathered this year. The data gathered has helped to provide a useful picture of how spring salmon behave, confirming that no one has correctly predicted these outcomes. Through building our understanding this will not only shape the project for the coming year, but enable us to scrutinise where the greatest pressures are exerted and provide a foundation for pinpointing future river improvements, one of which will start in 2013.

By the end of the salmon angling season (at the end of October) some five reports of captured tagged fish had been received. All were released back to the river. Reports from the clubs indicate that the high flows have provided continued sport through the course of the season when it was possible to fish. The majority of the tagged fish have not been angled and their survival through to spawning has been testament to the good condition in which they arrived in Spring.



Each of the tracked fish has painted its own tale by taking a distinctive migratory path. Most notably, one fish remained dormant from the 20<sup>th</sup> April right through until mid-November when it suddenly moved 16km upstream! For the most part, the summer months have seen very little in the way of movement with the tagged fish preferring to lie low. A cold snap in early November seemingly got our fish going, moving upward through the Ribble and into a handful of tributaries in search of partners and good spawning gravels. Come mid-December, most of these fish have been recorded as making a significant downward movement. Whilst we continue to monitor the tags to see

whether any make a return trip to sea, the vast majority of salmon will die after spawning as part of their natural life cycle. If you discover any fish on the river this winter containing a tag, then please let us know as soon as possible.

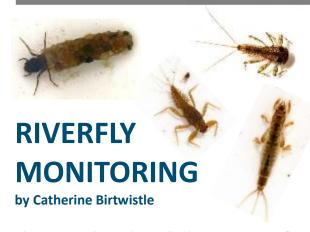
You can keep abreast of the project via the salmon tagging blog at;

www.ribbletrust.org.uk/ projects/salmon-tagging

May I offer a personal thank you to the dedicated volunteers that have helped to tag and track this year and those anglers who returned their tagged captures.



# **IDENTIFY**



The Trust hosted a further two riverfly monitoring workshops with the Riverfly Partnership in the summer of 2012, resulting in an additional 16 volunteers joining our programme. The number of sites that were regularly monitored across the Ribble Catchment throughout 2012 was 42.

Over the years, these volunteers have been crucial. Where riverfly numbers are found to be low, it identifies where we should focus our efforts. The volunteers also help us to monitor the outcomes of a project, by comparing 'before' and 'after' data.

There are other reasons why our riverfly monitors are important to us. They can flag up pollution incidents quickly, act as a deterrent to potential polluters, and could spot possible problems that would otherwise go unseen. They are the 'eyes and ears' of the rivers.

The data is now available to view in map form on our website;

#### www.ribbletrust.org.uk/volunteering

Volunteers commit an hour each month to collect this data for us. If you would like to attend a workshop in 2013 and join our monitoring programme, send an email to admin@ribbletrust.com to register.



# **RIVER WALKOVER SURVEYS**

by Adam Walmsley

In November 2012, 27 volunteers attended our River Walkover Survey workshops. After a short indoor session, volunteers were taken to nearby Worston Brook to have a go at carrying out a walkover



survey. The volunteers are now surveying their local streams and sending their findings in to us.

River walkover surveys are a simple way of recording what you see on your local streams and rivers. The surveys record problems, like pollution or barriers to fish migration, as well as positive aspects such as wildlife and tree cover. This information is really useful to help us identify what work needs doing and the benefits of work that has already been carried out.



With over 2,700 miles of watercourse in the catchment, it would be impossible for the Trust staff to see it all. This is why we need volunteers who can help us to carry out these surveys. Anyone can have a go at surveying their

local stream; simply tear out the survey form on the next page and fill it in next time you're by a river. The form can also be downloaded from our website if you want to do more stretches of river. There is no set length of river for these surveys, but 500m is offered as a guideline. If you have any questions about how to carry out a walkover survey, or would like to attend a training workshop in the future, please email adam@ribbletrust.com



#### **Ribble Rivers Trust**

#### River Walkover Survey Form



River direction



**DAFORN** abundance scale

 Dominant
 76% - 100%\*

 Abundant
 51% - 75%

 Frequent
 26% - 50%

 Occasional
 11% - 25%

 Rare
 1% - 10%

 Not present
 0%



\* approx. percentages

Where you see this symbol please take a photograph if possible Feel free to take photographs of any other features you see

YOUR DETAILS							
Name:	Address:						
Postcode:	Email:						
Tel: Mobi			obile:				
DETAILS OF SURVEY / SITE INFO	)	-	51				
Date:							
River/stream name:			Start grid ref / GPS:				
Location:			Finish grid ref / GPS:				
River Level: Flood / High / Normal / Low							
Weather on the day:							
HABITAT							
General site description:							
River channel: Natural / Semi-Natural / Artificial In-stream large woody debris: Yes / No						Yes / No	
Land use (circle all appropriate): Urban / Parks / Improved Grassland / Rough Grassland /							
880 8		Moorland /	Woodland	/ Other:	30		
Tree Distribution	Left bank	Right bank	% Shading:				
None			Dominant tree species:				
Isolated / Scattered			ĺ				
Regularly spaced individuals			ĺ				
Occasional clumps			Other habitat notes:				
Semi-continuous							
Continuous							
Bank erosion e.g. slumping, poa	ching, earth	cliff (please	give any otl	ner details on a sep	arate sheet	0	
Location and/or Grid ref / GPS	Left/Right bank	Severit	y (slight/ e/severe)	Length of erosion (m)	Stock access	Poaching	
					Y / N	Y / N	
21					Y / N	Y / N	
					Y / N	Y / N	
ARTIFICIAL FEATURES & BARRIE	RS O	Please give de	etails of any	other features on	a separate s	heet	
Type of feature: Weir / Slu	ice/ Culvert	/ Wall / Wat	erfall / Oth	er (please give d	etails)		
Height (m):		Length (m):					
Grid ref / GPS:							
Details:							

Notes:

### Ribble Rivers Trust

#### River Walkover Survey Form

INVASIVE NO	N-NATIVE SPECIES	S							
Himalayan balsam									
Abundance: Dominant / Abundant / Frequent / Occasional / Rare / Not Present									
Grid ref / GPS	S of the <u>furthest up</u>	ostream Himalayan balsar	m sighting:						
Is this the upstream limit on this watercourse? Yes			Yes / No /	Don't Know					
Japanese kno	otweed								
	ref / GPS	Patch size (m²)		Location and other notes					
3.000									
S.									
Giant hogweed O									
Grid	ref / GPS	Number of plants	Location and other notes						
i									
a.									
American Mink									
<u>Grid</u>	ref / GPS	Sighting / Spraint / Track		Location and other notes					
WATER QUA	LITY	N=12		EA incident	hotline: 0800 80 70 60				
In-stream alg	ae:	Yes / No Amo	unt of algae:	Slight /	Moderate / Severe				
Point-source	pollution	***							
Bank:	Left / Right	Grid ref / GPS:		Details:					
Bank:	Left / Right	Grid ref / GPS:		Details:					
Bank:	Left / Right	Grid ref / GPS: Details:							
Please give det	tails of any other site	s on a separate sheet							
WILDLIFE (cir	rcle if present)	Ō							
Invertebrates	s:	Dragonfly / Damselfly / Mayfly / Crayfish							
Mammals:		Otter / Water Vole / Bats (state sp. if known)							
Amphibians /	Reptiles:	Great crested newt / Common frog / Toad / Adder / Slow worm							
Birds:		Grey wagtail / Kingfisher / Sand martin / Dipper / Swift							
Fish:		Bullhead / Minnow / Trout / Salmon / Eel / Other (specify)							
	Plants: Water crowfoot (Ranunculus spp.) / Water cress / Purple loosestrife In addition to the above, please fill in the species record sheet below for particular species of interest, e.g.								
In additio	n to the above, plea	ase fill in the species record otters, adders		for particular s	pecies of interest, e.g.				
Species	Grid ref / GPS	Location		Abundance	Date (if diff. from above)				
				j					
	71								
Any other co	mments / notes:								

Please return your completed forms to: Ribble Rivers Trust, c/o Hanson Cement, Ribblesdale Works, Clitheroe, BB7 4QF
Or email to: admin@ribbletrust.com

# **INVASIVE NON-NATIVE SPECIES**

by Adam Walmsley

Report your sightings at;

www.lancashireinvasives.org

IT'S BEEN A BUSY FIRST YEAR FOR THE INVASIVES PROJECT. WE'VE SURVEYED 52 RIVERS, CARRIED OUT CONTROL WORK IN 30 LOCATIONS AND CLEARED HIMALAYAN BALSAM FROM 12KM OF STREAM. THANK YOU TO THE VOLUNTEERS WHO HAVE HELPED WITH THIS WORK, LET'S AIM TO DO EVEN MORE NEXT YEAR!



#### **HIMALAYAN BALSAM**

Throughout the summer, we have been out on streams around the catchment pulling up Himalayan balsam. We start at the upstream extent on each watercourse so that the cleared areas aren't re-colonised by seeds washing downriver. Approximately 12 km² of balsam has been controlled in 2012, including 12 km of watercourse. We have sown native wildflowers in these areas to help replace the nectar source for insects. Thanks to Ribblesdale Rotary Club for their help on Ings Beck.

#### SPRAYING AND STEM INJECTING

Japanese knotweed and giant hogweed need herbicides to get them under control. The wet summer has hampered our spraying efforts, but we were still able to spray 14 knotweed sites. Several volunteers have completed training at Myerscough College to learn how to carry out this spraying. Stem injection is a relatively new technique and can be used in wet weather. The herbicide is injected directly into the stem so there is less risk to the environment.





#### MINK MONITORING

We have several mink rafts and traps active around the catchment which help us to monitor the presence and distribution of mink. Camera traps are also used to get direct evidence of mink and their activities. These have also captured footage of an otter. To see the video, visit the video gallery on the Ribble Trust website. If you would like to borrow a mink raft and/or trap, please get in touch.



#### **BIOSECURITY**

Practicing good biosecurity helps prevent the introduction of new invasive species to the catchment and reduces their spread within the catchment.

Stop the Spread – remember to Check, Clean and Dry your boots and equipment whenever you move between waterbodies.

Be Plant Wise – find out more about the plants in your pond and how to dispose of them responsibly.



# RIVER IMPROVEMENT FUND

THE RIVER IMPROVEMENT FUND IS A COMPETITIVE FUNDING POT THAT WAS DISTRUBUTED BY THE RIVERS TRUST, WHICH IS THE UMBRELLA BODY FOR ALL RIVERS TRUSTS IN ENGLAND AND WALES. IN 2011, THE RIBBLE TRUST WERE SUCCESSFUL IN SECURING FUNDING FOR SIX PROJECTS, ALL OF WHICH WERE DELIVERED IN 2012.



# EASINGTON RESTORATION

Budget: £37,000 Watercourse: Easington Brook, tributary of the River Hodder





The next step was to tackle an old concrete ford that was partially obstructing the path of migratory fish. The existing structure was removed completely and replaced with a new bridge, complete with removable rails to allow for wider farm machinery. The channel sides were reinforced with boulders, which were donated in kind by Hanson Cement.

As well as allowing fish passage, the removal of the existing ford has also resulted in a reduction in flood risk, a return to natural substrate movement and the formation of some excellent spawning gravels, which occurred just in time for the 2012 spawning season.

This work really complements the habitat restoration that has already carried out by the Trust on Easington Brook, and should see it becoming an excellent nursery stream for fish.

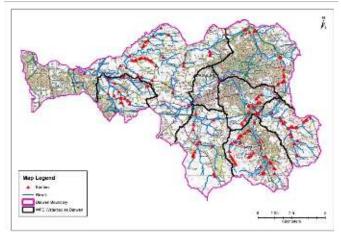


#### **BOND BECK FISH EASEMENT**

**Budget:** £7,000 **Watercourse:** Bond Beck, tributary of the River Ribble

The footings of a bridge over Bond Beck were found to be partially obstructing fish migration. Even though the step was relatively low, there was little depth of water on the sill beneath the bridge to allow fish to swim through. A rock-ramp fish easement was installed to sufficiently raise the water level and allow easy passage through.





Map shows locations of barriers in the Darwen Catchment

#### DARWEN FEASIBILITY STUDY

**Budget:** £35,000 **Watercourse:** River Darwen

The River Darwen is the second most modified and industrialised watercourse after the Rivers Brun and Calder in Burnley. Funding was secured to assess whether the connectivity of the River Darwen could be improved, i.e. could some of it be opened up to migratory fish and if so, where? Walkover surveys determined the locations of barriers, water quality and habitat characteristics. 160 barriers were identified and these were then prioritised to determine where restoration work would result in maximum benefits. Each priority barrier was then assessed and a list of options compiled, detailing the different ways in which the obstruction could be made passable to fish. The Ribble Trust will now apply for further funding to tackle these barriers in the future.

# BRUN FISH EASEMENT

**Budget:** £50,000 **Watercourse:** River Brun, tributary of the River Calder

There has already been plenty going on in Burnley as part of our development of our Heritage Lottery funded URES project and to complement this work, a





weir on the River Brun in Thompson Park drew additional funding from the River Improvement Fund. The construction of the fish easement was challenging as wet weather and subsequent high flows caused long delays. However, the finished design works well and it is another step closer to opening up the River Brun to migratory fish.



#### CHIPPING FISH EASEMENTS

**Budget:** £20,000 **Watercourse:** Chipping Brook, tributary of the River Loud

Funding was secured to carry our work to two separate weirs on Chipping Brook. The first (pictured above) involved the construction of pre-barrages to create a series of smaller steps up to the main weir. Smaller 'letterbox' holes were trialled in the walls and lined with bristles to allow additional passage for eels. Although removal was preferable for the second weir (pictured below), it existed to feed a local pond, which is a valued community asset. Instead, a by-pass channel was created, which can be seen to the left of the weir in the picture below.



### STOCK BECK FISH EASEMENT

Budget: £12,000 Watercourse: Stock Beck, tributary of the River Ribble

A small weir on Stock Beck in Victory Park, Barnoldswick, was found to pose a significant barrier to fish migration. It wasn't so much the height of the weir that was preventing fish passage, more the shallow water at the base of the weir not providing enough take-off depth for fish to jump from. Rather than remove the weir and risk upstream erosion, a rock ramp was constructed to allow easy passage for fish in all flow conditions. This fish easement the latest was addition to the Trust's multi-year programme of works

on Stock Beck, which





now continues as part of the Catchment Restoration Fund from Defra.

# **RESTORE**

# **CAM AND GAYLE BECKS**

Cam and Gayle Becks are the formative tributaries of the River Ribble and are sourced from the Yorkshire Dales. With funding from the Ninevah Trust and the Environment Agency, the Trust undertook studies as to why these becks were not supporting the level of biodiversity that they should. The river channels were found to be overly widened and the water too shallow. It is believed that the presence of man-made drainage grips on the moors has affected the natural flow regimes of the becks, generating



flashy flows rather than a steady influx of water. The channels have widened to accommodate the high flows, but are almost starved of water in some places during periods of low rainfall.



To ameliorate the issue, the Trust mapped the grips on the surrounding moorland and ran an analysis to determine which grips were having the most impact. Some of the priority grips were blocked in 2011 using peat dams with materials from the site, and more grip blocking work is planned for 2013.





Another reason for the failure of Cam and Gayle Becks to sustain the expected level of wildlife is the lack of riparian habitat, i.e. trees and vegetation along the riverbank. In 2011, the Trust began fencing off a section of Cam Beck, which was planted with 4000 trees in 2012.

Following this, a large section of Gayle Beck was also fenced. More habitat restoration is planned for 2013, with the addition of large woody debris along the channel sides.







# Greggs volunteers fencing

# **STOCK BECK**

Stock Beck is sourced from the moors that surround Barnoldswick and it enters the River Ribble near Gisburn. For several years it has been one of the Trust's priority watercourses due to the beck's poor ecological status, as it has the potential to be an excellent nursery stream for salmonids and to support a wealth of biodiversity.

Historically, Stock Beck has been dredged and deepened to alleviate flooding onto farmland. This has led to deep, slow-flowing channels with unsuitable substrate for spawning fish and steep banks that are prone to erosion. Over the past couple of years, the Trust has erected fences and planted trees along some sections of the beck to help stabilise the banks and provide additional habitat.

In 2012, the Lancashire Environmental Fund granted money to carry out more

of this work and a team of volunteers from Greggs the bakers helped in the delivery of the fencing and tree planting during their environmental leave days.

To achieve a more natural flow rate, a series of pools and riffles have been created by installing baffles and pinch-points to vary the flow of water. Gravel was also added in 2011 to provide suitable spawning habitat for salmonids. In the winter of 2012, a salmon was seen to be cutting a red in our newly-added gravels, which is testimony to the success of the project.

This habitat work, coupled with the new fish easement that was installed on the weir in Barnoldswick, could see the ecological status of Stock Beck being raised in the near future.







#### Climate change has been a hot topic for years now, but how will it affect our rivers and the wildlife they sustain?

The UK Climate Projections (UKCP09) have predicted that by 2050, the average summer air temperatures could rise by as



much as 4°C (Murphy et al. 2009). Along with it, water temperatures in our rivers and streams will also increase. The optimum water

temperature for salmonid survival is reportedly between 10 and 15°C, while the critical limit set by the European Inland Fisheries Advisory Committee is 21.5°C. Exceed this limit for a few consecutive days and the oxygen levels in the water will become severely depleted, possibly resulting in a fish kill and a reduction in populations of other riverine species that rely on them for food.



Our electrofishing surveys in 2012 told us that the average water temperature in the Ribble Catchment over the summer months was 13.7°C, however the highest temperature recorded was 18.2°C, only 3 degrees below the critical limit. Therefore, as the UK continues to warm, action needs to be taken to keep our rivers cool.

Trees seem to be the best solution. Not only do they shade the water from direct sunlight, they also bring other benefits too, such as providing habitat for wildlife, buffering diffuse pollution and stabilising riverbanks to prevent excessive erosion. Furthermore, trees soak up carbon dioxide from the atmosphere, providing a much needed means of carbon sequestration.

The Environment Agency is piloting the Keeping Rivers Cool project on the Ribble Catchment. The entire area has been flown to collect aerial LiDAR (Light Detection and Ranging) data, which works in a similar way to radar, except it uses light rather than sound. This data builds a picture so that we can see exactly where trees are present along a watercourse and

where they are lacking, helping us to focus our work on the areas that are most in need. Topography is also taken into consideration, as valley sides can provide a degree of shading too.

The Ribble Trust is already well underway with the delivery of the project, liaising with landowners and agreeing tree

planting schemes. Where the amount of trees planted is substantial, the landowner could qualify for an annual payment. Over the 2012/2013 winter season, some 40,000 trees will have been



planted catchment-wide by the Trust's army of dedicated volunteers. Anyone can help with the tree planting, email admin@ribbletrust.com to get involved.

#### References

Murphy, J.M. et al. (2009). Climate change, river conservation and the adaptation challenge. Aquat. Conserv., 19, 609–613



# **CATCHMENT RESTORATION FUND**

THE CATCHMENT RESTORATION FUND FROM DEFRA HAS SUPERCEDED THE RIVER IMPROVEMENT FUND AND IS OPEN TO ALL NGOs. IN THE SUMMER OF 2012, WE WERE DELIGHTED TO HEAR THAT THREE OF OUR BIDS HAD MET WITH SUCCESS. THESE PROJECTS WILL BE DELIVERED OVER THE NEXT THREE YEARS, BRINGING SIGNIFICANT ECOLOGICAL BENEFITS TO OUR WATERCOURSES.



## LIMESTONE RIBBLE RESTORATION

Limestone Ribble Restoration is a partnership project that will use CRF funds to improve priority watercourses in the northern tip of the Ribble Catchment, from the very source of the River Ribble at Ribblehead, down to Gisburn. This area has been quarried, farmed and industrialised for hundreds of years. As a result, degraded habitat, diffuse pollution and obstructions to fish passage are causing certain watercourses in this area to fail to meet the required standards under the Water Framework Directive (WFD).

Work has already been undertaken by the Ribble Trust and the Environment Agency to determine the cause of the degraded habitat. It was identified that unnatural upland drainage caused by man-made grips and a lack of riparian habitat were responsible. Together these factors result in poor hydrology and hydro-geomorphology, which has created abnormally wide and shallow channels which are prone to elevated water temperatures.

To ensure that the failing watercourses achieve 'Good Ecological Status' under the WFD, the Ribble Trust plan to block some of the upland drainage grips, reconnect the

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fragmented habitat by removing barriers to fish migration, and regenerate riverside habitat by erecting fences and planting trees to reduce the amount of diffuse pollution entering the rivers. This will encourage a sustainable return to natural river processes.

The project will also help towards improving bathing water standards at the coast, by reducing the amount of pathogens attributable to farming practices from being washed downstream.

Some of the partners that we are working with on this project include the Yorkshire Dales Millennium Trust, the Yorkshire Dales National Park, local angling clubs, the Wild Trout Trust, the Woodland Trust and Durham University.

# DIFFUSING THE ISSUE IN RURAL RIBBLE

A large proportion of the land within the Ribble Catchment is used for agriculture. In places that are intensively farmed, rivers may face water quality issues attributable to diffuse pollution and poor riverside habitat, causing them to fail to meet the standards that are set by the Water Framework Directive. The funding for this project will be focused on five separate sub-catchments, which have been found to be the most in need of improvement.

The five priority watercourses are;

- River Loud
- Stock Beck
- Skirden Beck
- Easington Brook
- Swanside



Through targeted farm visits, opportunities for improving farm infrastructure can be identified. This might be anything from rainwater harvesting and fixing broken guttering, to tree planting schemes that could result in a woodland grant payment for the farmer or landowner.

The creation of riverside habitat will also be an important aspect of the project. Once vegetation becomes established along a riverbank, it will act as a buffer zone to diffuse pollution and therefore improve the water quality.

The key to the success of this project will be in finding opportunities for improvement that are sustainable, providing benefits for both the landowner and the environment.



Through restoration work, the project will address several issues, including:

- Fertiliser run-off into rivers, which can cause nutrient enrichment and impact negatively on river ecology
- Excessive sediment input from bank erosion and poaching, which has a direct adverse effect on water quality
- Barriers to fish migration, preventing fish from reaching their preferred spawning habitat
- Interrupted natural downstream movement of substrate, which reduces spawning habitat for salmonids.
- Poor in-channel and riparian habitat for riverine species
- Failed bathing water standards in coastal reaches due to the presence of excess pathogens attributable to upstream sources

# **COLNE WATER CATCHMENT RESTORATION**

The rivers and streams in the Colne Water sub-catchment face the widest range of issues. There are areas that are intensely farmed, some parts are heavily urbanised, and man-made drainage grips are present on the moors. Some of the river channels were also heavily modified during the Industrial Revolution.

Diffuse pollution, a lack of riparian habitat, unnatural flow regimes attributable to upland drainage and obstructions to fish passage are causing certain watercourses in the Colne Water Catchment to fail to meet the required standards under the Water Framework Directive. Fish populations, particularly salmonids, have been found to be greatly diminished.

The Ribble Trust aims to improve the habitat and connectivity in order to generate sustainable fish populations. The creation of riparian buffer zones will reduce diffuse pollution from farmland and roads, and some upland drainage grips are to be blocked to encourage a sustainable return to natural flow regimes.

As with all of our projects, community engagement is essential to achieving long term success. as encourages local ownership and support. It is seen as an part of an important integrated catchment management approach. Engagement activities will include public consultations, practical volunteering Colne Water Catchment Restoration
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activities like river clean-ups, wildlife surveys and tree planting, and awareness raising through walkover surveys and appraisal tours.

Some of the partners that we will be working with include Pendle Borough Council, Durham University, the Woodland Trust, the Forestry Commission, Environment Agency, Lancashire Wildlife Trust and 'friends of' groups.







# **URBAN RIVER ENHANCEMENT SCHEME (URES)**

Reconnecting people with our natural river heritage - by Victoria Dewhurst

THE INITIAL YEAR OF DEVELOPMENT FOR URES WAS A TREMENDOUS SUCCESS. THE APPLICATION FOR THE SECOND ROUND OF FUNDING TO DELIVER THE PROJECT WAS SUBMITTED IN DECEMBER 2012 AND AT THE TIME OF PRINTING, THE TRUST EAGERLY AWAITS A DECISION FROM THE HERITAGE LOTTERY FUND. AN ENORMOUS 'THANK YOU' GOES TO EACH AND EVERY INDIVIDUAL WHO WORKED TOGETHER TO HELP THE URES REACH THIS STAGE.





2012 saw the development of a programme of works that has the potential to transform the rivers of Burnley into an asset for everyone to cherish and enjoy. The programme includes both physical works to the river itself, as well as a host of activities that will engage the local communities, teach them more about their river and instil a sense of ownership to ensure the longevity of the project. If the URES gets the go-ahead, the following restoration work and public engagement activities will be delivered:

Increase the connectivity of the urban riverine habitat - connect the riverine habitats up and downstream of Burnley town centre by constructing a fish pass on the weir near the Mohiuddin International Girls College. This will allow the migration of fish above the Burnley weir into the Rivers Brun, Don, Thursden Brook and Swindon Water.

Naturalise the highly modified river by constructing in-channel improvements - restore the natural hydrology and ecological habitat of the rivers Calder and Brun through Burnley town centre. Pool and riffle zones will be created by widening the central flume and adjusting the river bed to create areas of low energy along straight sections of river, thus providing resting places for fish.

Bankside access and improvement works — make a lasting improvement and impact on the river, and for those using the river corridor for access and recreation, improve paths and railings, remove litter, debris and invasive species, and install heritage information, interpretation boards and artworks.

Programme of local events - engage the wider public and raise awareness of the range of issues of concern with our natural river heritage, galvanise the URES project, focus community engagement and offer a platform to celebrate the outcomes and achievements.

**River Habitat Management Training -** professional training courses designed to involve and equip more local people with the skills to help maintain, monitor and manage the health of our natural river heritage.

**Local River Action Groups -** practical activities to actively engage local people in making their own decisions, learn about and physically improve their own and other people's natural river heritage.

**River in the Classroom -** directly engage school children in our river heritage by raising trout and mayfly in the classroom, train teachers and produce educational resources and a short film.

Love Your River Oral History - research and record people and their lives with particular reference to living, working, visiting, using, enjoying and/or difficulties associated with rivers.

**Creative Rivers In Burnley (CRIB)** – utilising arts and multimedia technology to engage young people, specifically 13 to 25 year olds, in achieving arts awards whilst focused on and inspired by Burnley's natural river heritage and the associated wildlife.

When You See Water — a community response to the River Brun designed to help generate a sense of ownership and pride in our river heritage. Drama and costume making workshops will lead to an outdoor theatre performance, a spectacular carnival of giant puppets and large scale gitantes that tell an unfolding story of the world of the rivers.

There were many more potential community projects and ideas developed by the people of Burnley in 2012, including constructing a wildlife hide near the River Brun and filming a virtual river exhibition. Although not all of these ideas could be included in the budget, the Trust will endeavour to continue to work with the communities of Burnley to help support local projects and initiatives which aim to reconnect people with our natural river heritage.

\*\*Watch the URES video at www.ures-burnley.org.uk\*\*



# Ribble Life

#### by Jo Spencer

THE TRUST HAS BEEN WORKING IN PARTNERSHIP WITH THE ENVIRONMENT AGENCY FOR THE LAST 12 MONTHS AS PART OF A DEFRA FUNDED PILOT SCHEME. 'RIBBLE LIFE' IS ONE OF 25 CATCHMENT PILOTS ACROSS ENGLAND - AIMED AT EXPLORING BETTER WAYS TO ENGAGE WITH PEOPLE AND ORGANISATIONS TO HELP IMPROVE THE WATER ENVIRONMENT AT A LOCAL CATCHMENT LEVEL. THE MAIN TASK OF THE PILOT WAS TO PRODUCE A PLAN TO IMPROVE THE CATCHMENT'S WATER ENVIRONMENT BY DECEMBER 2012.

#### THE CATCHMENT BASED APPROACH

Defra's catchment based approach was announced in 2011 by Richard Benyon, Minister for Natural Environment and Fisheries. It recognises that tackling land management and water issues effectively cannot be solely undertaken by, or the responsibility of, one organisation but requires many actors to work in conjunction. A key aim of the project was the engagement and involvement of a wide range of organisations, individuals and the public.

#### **COMMUNITIES OF INTEREST**

Over the past year, we have worked with key organisations throughout the Ribble Catchment to understand how best to improve the River Ribble and the rivers that flow into it. This has included one-to -one meetings with organisations such as Yorkshire Dales National Park Authority, United Utilities and Lancashire Wildlife Trust; focus groups exploring recreation and access issues and workshops including an Angling workshop in May 2012, which was attended by 10 angling clubs from across the Ribble Catchment.

A Stakeholder Exchange has also been established, made up of organisations with an interest or 'stake' in how the catchment is managed. This group has been independently facilitated by Dr Nigel Watson from Lancaster University and has provided expert advice and knowledge to support the development of a shared Catchment Action Plan for the Ribble.

#### **COMMUNITIES OF PLACE**

We have also asked people who live and work in the Ribble Catchment to tell us about the biggest issues for their rivers and to suggest projects to tackle those issues. Comments were invited via a webbased questionnaire and online map, attendance at community events and meetings and through the hosting of a number of Catchment Appraisal Tours across the catchment. These tours have included walkovers of particular stretches of river to look at some of the issues first hand with a member of staff from the Ribble Rivers Trust.

The tours have been a great way for different groups and individuals to learn about the importance of our local rivers and streams and encourage more people to become the eyes and ears of the catchment and know what to look out for in terms of invasive species, pollution incidents, erosion, etc.

#### **ACTIONS TO IMPROVE OUR WATER ENVIRONMENT**

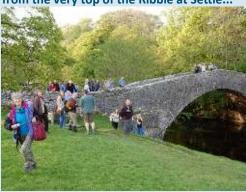
There is already a huge amount of work going on in the Ribble Catchment, and a key part of developing a plan for the whole catchment was to gather together that information. The resulting plan has been developed to be an interactive 'working' document which can be viewed online at www.ribblelife.org The plan is only the start and is by no means complete, and does not tackle all of the issues in the Ribble Catchment.

We still need your knowledge and view on what makes the Ribble Catchment special and how we ensure its qualities are maintained. You can tell us about your favourite spot along the river or make suggestions on how it can be improved by logging onto the website and adding your 'river place' to the interactive map. You can also upload your favourite photos, videos and even sound recordings if you have them.



We would like to thank the individuals and organisations, particularly the members of the Stakeholder Exchange, who have given their time and contributed their opinions to help make the Catchment Action Plan for the Ribble a reality. We look forward to continuing to work with you as we develop further actions for the plan and turn these into delivery on the ground.

Catchment appraisal tours were hosted, from the very top of the Ribble at Settle...



...to the Ribble estuary at Preston.



Opportunities were identified...



..and solutions discussed.



# **SUSTAIN**

# **ANGLING PASSPORT SCHEME**

The Ribble Trust's Angling Passport Scheme has now seen its third fishing season and its popularity continues to grow steadily, especially since it included the Environment Agency's beat on the main Ribble at Mitton.

There are now eight beats in total: one on Mearley Brook in Clitheroe, one on Bottoms Beck near Stocks Reservoir, one on Bashall Brook near Bashall Eaves, three on Stock Beck near Gisburn, one on the main River Ribble

at Mitton and the newest addition is Hullown Lake near Colne. This lake used to attract a great number of anglers when it was stocked. Stocking has ceased for some time now, but the Trust are currently carrying out restoration work on Colne Water in the hopes of returning fish to the lake the natural way.

The beats are individually priced between £2.50 and £15.00 per day, depending on where you want to fish. Tokens can be purchased from the Ribble Trust prior to fishing and then posted in the letterboxes on arrival. A valid Environment Agency permit

must be held to fish our beats.

The money that is generated through the scheme is shared between the Trust and the landowner. The Trust uses the income as match funding for habitat projects, so

every penny goes straight back into improving the river. For the landowner, their share of the money is a tangible illustration of the value in maintaining a healthy watercourse i.e. the better the water quality and habitat, the higher the fish populations, and the more anglers there will be paying to fish there.

# Buy tokens online: www.theriverstrust.org/passport/ribble



# **GET INVOLVED**

# Volunteer

Help to make physical improvements to the river environment that will benefit wildlife & people for years to come.

You can volunteer for one-off opportunities like fencing, tree planting, river clean-ups and other habitat work, or get more involved in our monitoring by carrying our regular invertebrate surveys, river walkover surveys and helping with our electrofishing. Email

admin@ribbletrust.com to join the volunteer mailing list.

# Membership

Become a member of the Ribble Rivers Trust to be kept up to date with our progress and projects. The money you give helps with the Trust's work and securing additional funding so we can continue making improvements to the rivers. Join online at www.ribbletrust.org.uk or contact us for a membership form.

#### Individual membership:

£20 per year

Life membership:

£250

Riparian owners and businesses:

£250 per year

Angling clubs:

contact admin@ribbletrust.com for more details.

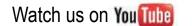
# Make a donation

If you like what you see in this newsletter, please allow our work to continue by making a donation. This can be done online at; www.ribbletrust.org.uk

or cheques can be made payable to 'Ribble Catchment Conservation Trust Ltd' and posted to the address shown on the back of the newsletter.









# **FUNDERS AND SUPPORTERS**

May we say a huge **thank you** to everyone who has supported our work in 2012. Whether it has been through donations of money or donations of time, both mean so much to the day-to-day operation of the Trust. Without our funders, supporters, members and volunteers, we could not carry out the extent of river restoration and conservation that we do, and the Ribble Catchment is most definitely a better place for it.

Special thanks goes to angling clubs and organisations, our die-hard volunteers, individual donors, riparian owners, local councils, the Old Post House in Clitheroe for our use of their meeting facilities, Dunsop Trout Farm for supporting our Trout in the Classroom project and our esteemed board of trustees, who volunteer their time and resources to ensure that the Trust keeps a steady course.





































For the future of our rivers...



# RIBBLE RIVERS' TRUST

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