RIBBLE RIVERS TRUST

Welcome to our 8th newsletter

This year has been one of growth for RRT, we have increased team members, volunteers and breadth & quantity of work! We have always been a volunteer based organisation, but recently we have really expanded this to all aspects of our work, from fencing and tree planting to monitoring and project delivery. Working with volunteers not only helps us to deliver projects more effectively but it encourages a sense of ownership of the rivers and streams of the Ribble by the communities that benefit. It is this activity that has brought about our partnership with the Environment Agency in the Ribble Life project. Emphasising the benefits of clean and healthy rivers is something that is key to the mantra of the Trust, and 'Ribble Life' aims to demonstrate this and continue to expand the work we do by working with others. I am really excited by the prospects of working collaboratively with so many individuals, groups and organisations that are as passionate about the Ribble as we are, and the improvements we can make together. I hope by reading this newsletter that you are as amazed as I am at the sheer quantity of work achieved. Our effectiveness is rooted in our passion and dedication, and we will continue to demonstrate this by delivering more improvements next year and planning work for the year after! You will find articles on all our work within the newsletter and opportunities for involvement with each of the projects, and you can keep up to date with our progress throughout the year by reading the blog on our website. Thank you to all our supporters, funders, volunteers and trustees. I look forward to seeing you on the river bank! - Jack Spees, Director.

IN THIS NEWSLETTER…

A word from our Chairman

The core work of the Trust consists of measuring the health of all the rivers and streams of the Ribble Catchment (over 2,500km²). This is done by carrying out fish, invertebrate and river corridor surveys, from which we then develop projects. All the Trust's work is designed to improve the river habitat for all wildlife and to create a better environment for people to cherish and enjoy. This newsletter highlights some of our recent and future work.

To carry out our core work, the Trust needs a permanent team consisting of the Director, Fisheries Scientist, Habitat Project Manager and Administrator, together with all the necessary equipment and office accommodation. The Trust needs to secure a stable income to maintain this. Some of this income comes from corporate support and grants, and the balance needs to come from donations and subscriptions. We are very grateful for the help that has been given in the past and urge you to continue supporting us. Volunteers are also a very important part of our work and the contribution they give to our projects is invaluable.

The rivers have never had an organisation like the Trust doing so much work across the catchment - let's keep the momentum going!
- Philip Lord, Chairman.

Wildlife Surveys on the Ribble Catchment

Every year, the Trust undertakes surveys across the catchment, often with the help of volunteers. This is what we look for and what it can tell us about the health of our rivers.

Fish

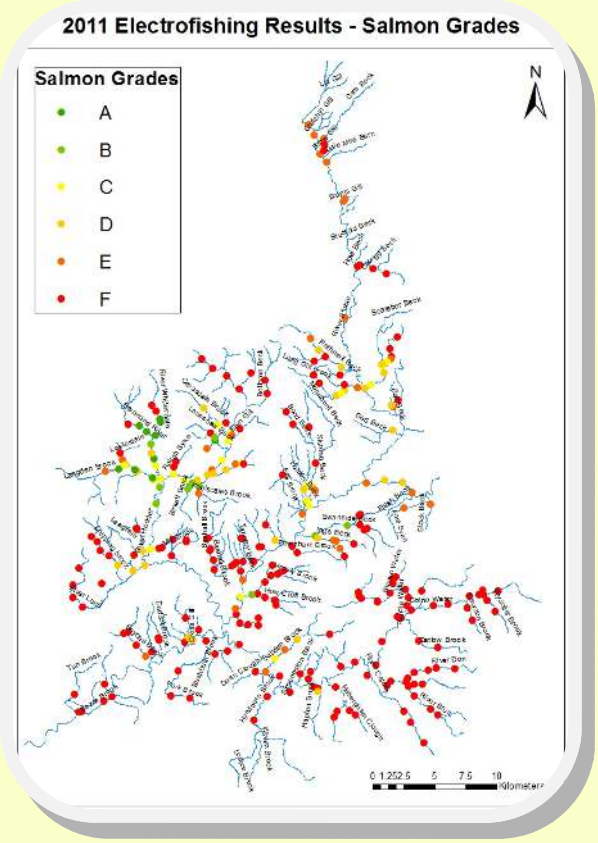
Fish surveys are undertaken every summer using a method known as electrofishing, where a mild electric current is passed through the water so that we can net the fish, count them and measure them before returning them to the river. We have four different fish surveying projects. One assesses the health of the Ribble's fish populations by surveying over 300 sites across the catchment. A second measures the effectiveness of our spawning channels, a third looks at the impacts of water abstraction, and the fourth evaluates the impacts of invasive signal crayfish. As well as being able to compare the fish population data year upon year, it also helps us target our habitat work by highlighting where there are detrimental effects on fish populations occurring. Fish are an indicator species of the health of a river in general, so by undertaking work in areas that have low populations of fish, we are also benefitting the wider river ecology, for example improving riparian habitat for otters and birds.

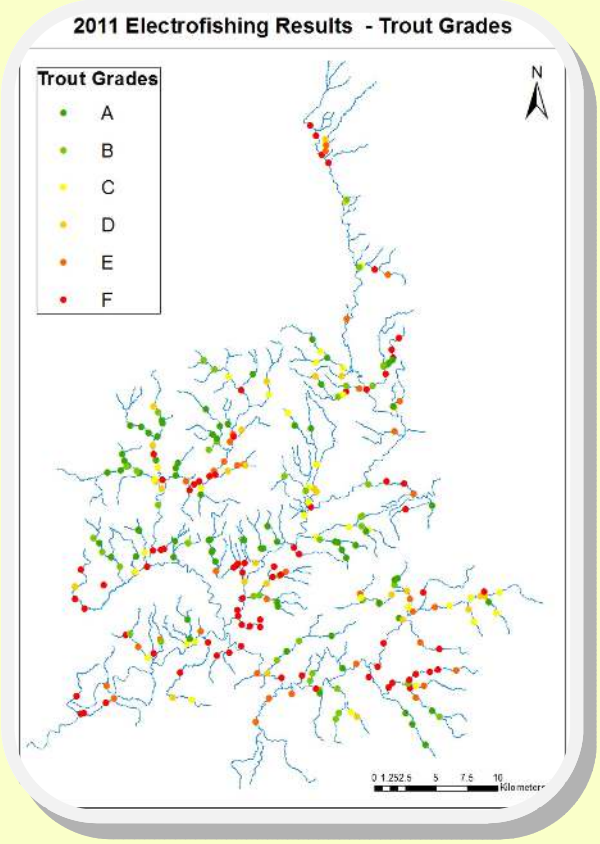
In 2011, 579 individual sites were monitored. This was achieved through a joint effort by volunteers and Trust staff. Over 12,000 juvenile trout and salmon were caught and 11,102 bullhead! Other species that were recorded were;

- Eels (116)
- Stoneloach (2336)
- Lamprey (14)
- Stickleback (193)
- Gudgeon (7)
- Grayling (1)
- Dace (3)
- Minnow (1743)
- Chub (4)

Wildlife Surveys on the Ribble Catchment

Although large numbers of fish were caught in 2011, there are still less than should be observed at all our sites. Overall salmon populations have shown a slight decrease on previous years across the catchment, whereas trout have shown a slight increase. The highest grades of trout and salmon were found within the Hodder Catchment. The reasons for the changes in populations are thought to be mainly the result of the prolonged hard winter over 2010/2011 followed by a dry spring. Improvements were seen in both trout and salmon at several of the Trust's previous habitat project sites, notably Stock Beck.





Crayfish

Crayfish are freshwater crustaceans related to the lobster family and they live in the smaller tributaries of the river. Within the Ribble Catchment there are two kinds of crayfish - our native white claws and the American signal crayfish. The signals are an invasive species, introduced into the Ribble over ten years ago, and currently restricted to two small tributaries. They are larger than our natives and outcompete them for food, and they are well on their way to replacing our white claws completely, not just on the Ribble but in the UK as a whole. Furthermore, the signal crayfish predate heavily on fish eggs and juvenile fish and can decimate populations. They are also carriers of a plague which, if transferred to a river containing white claws, could wipe out the entire population. It is important when moving from river to river that waders and equipment are disinfected to prevent the spread of the disease. There is currently no known way of eradicating these invasive species in our catchment, but we can monitor their extent. Scientists are currently working on methods to eradicate signal crayfish so that we can prevent the spread before it's too late. It is illegal to catch any species of crayfish without a licence in the Ribble. It is also illegal to introduce signal crayfish into a river, or to return them if caught. Distinguishing between the species can be difficult, so if you do happen across any crayfish within the Ribble Catchment it is important to report your sightings to the Trust.

Contact Gareth to be involved with fish surveys on 01200 444452 or email gareth@ribbletrust.com

Wildlife Surveys on the Ribble Catchment

Water Voles

Water voles live in the banks of rivers and streams where the water is slow-moving and the vegetation is long to provide cover. Sadly, their populations in the UK have crashed by an estimated 95% over the last 20 years and as such they have become a protected species. It was the introduction of predatory American mink, an invasive species, that caused their decline, together with the destruction of habitat by farming methods. Although present at several sites in the North West, it is unknown whether there are water voles within the Ribble Catchment. There are areas in the West Pennine Moors and the Forest of Bowland that would provide ideal habitat for them, and with continuing efforts to eradicate mink, we may see a return at some point in the future. In the meantime, the Trust are undertaking water vole surveys at likely sites before carrying out any kind of habitat work.

Otters

In the 1970s, otters were absent from much of the UK due to over-use of pesticides and excessive pollution entering our waterways. Recently however, we have seen their numbers increasing in the Ribble Catchment which indicates better water quality, improved habitat and sufficient food i.e. fish, invertebrates and small mammals. During the summer of 2011 the Trust joined forces with the Envrionment Agency's otter expert to train a number of volunteers in how to spot signs of otters. One of the most reliable ways of determining whether otters are present at a site is to look for spraints which are usually left on rocks in noticeable places - their way of marking their territory. It is also possible to look for paw prints, however they can easily be confused with other mammals. As well as having a small team of fully-trained otter spotters covering the catchment, surveys are also done at every electrofishing site. The data that is collected is combined with the Environment Agency's data to get a better picture of where otters are living in our catchment and how many there are.

Invertebrates

A really good way to determine the quality of the water at a particular site is to look at the number and variety of invertebrates that are present in the gravel. Once a month, the Trust's team of invertebrate monitors head out to their designated sites on the river to conduct a kick sample. This involves taking a sample of the invertebrates that are present at the site and counting the numbers of each species. The cleaner the water, the more invertebrates should be present. If, one month, the results are much lower than expected, it could indicate that pollution has occurred. In this instance, the Trust would investigate the situation further, and if found to be serious, pass it on to the Environment Agency who may seek to prosecute the offenders. This hopefully prevents any future pollution incidents from occurring, and also helps to deter other potential polluters. A monthly survey is quite a commitment, but it's an important job, and the more people we have monitoring, the better we can keep an eye on the health of our rivers.

Contact Catherine to be involved with wildlife surveys on 01200 444452 or email admin@ribbletrust.com

Salmon Tagging

By Gareth Jones

Wild salmon are commonly understood to arrive in our rivers to spawn late in the year. However, a lesser known fact is that there are distinct "runs" of salmon, one of which occurs during the spring. The aptly named 'spring salmon' are an indicator of river health, and bring many benefits to other wildlife such as otters, as well as benefits to the local economy. Despite these benefits, the Ribble spring salmon are in decline, and little is known about the reasons. Courtesy of our trustee's vision (Dave Wilmot), the Ribble Rivers Trust is now planning to address this with our partners at the Environment Agency and the Ribble Fisheries Consultative Association. We will be begin tracking the fish up the Ribble to learn where they are going. Once we know this, we will target habitat, migration and water quality improvements that will support the future sustainability of our spring salmon.

Through working collaboratively, a new project team has formed and we will acquire a shiny new radio tagging kit in the New Year. Fish tagging is scheduled to begin in February and once in place our detection team will track until the end of the year. We are keen for volunteers to help with our tracking work, and if you would like more information please visit **www.ribbletrust.org.uk/education/salmon-tagging**

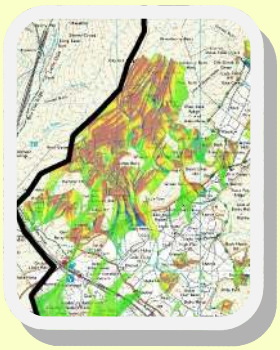
Contact Gareth about salmon tagging on 01200 444452 or email gareth@ribbletrust.com

Grip Blocking Surveys

Our investigation into Cam and Gayle Beck last year pointed a finger at the upland drainage or "grips" as one of the reasons that the two streams are not supporting the wildlife they should be. Grips can have various impacts on streams, from causing diffuse pollution to affecting flooding and extreme low flows. They also affect upland peat bogs. Sphagnum moss usually thrives in these areas and helps to trap carbon from the atmosphere, however the grips have a drying effect on the soil which reduces the growth of the moss. This drying effect also reduces biodiversity by changing the plant structure. Grips occur all across England's upland moors, and many organisations are blocking them to restore rivers and moorland. However it is essential that you understand grip blocking and its implications before undertaking the work, as some of the outcomes may not give the results you set out to achieve.

After securing funding from the EA and the Nineveh Trust we undertook a desktop study to identify the extent of the grips. We modelled which grips were having the most impacts, and if we were to block them, would it achieve the required outcomes. Following this, Richard Atton spent a great deal of time "ground truthing", i.e. walking every metre of each grip to asses the amount of work required to block it, so that we could obtain a price from contractors for the work.

Following careful liaison with all parties involved (landowner, grazers, shooting tenants, Yorkshire Dales National Park and Natural England) we obtained consent and began blocking the grips!



Models of grip impacts

Grip surveying

First grip blocked!!

Habitat Projects

Each year, the Ribble Trust takes on various habitat schemes around the catchment. Much of the work is focused on the smaller streams and tributaries as these are the 'arteries' of the river. If all of these are healthy, the main river will be healthy. Habitat projects seek to improve the in-stream and river bank habitat which goes some way to reducing diffuse pollution. This work helps to promote biodiversity. With species such as salmon, trout, eels, otters, water voles, king fishers and bats being priority

Stock Beck

Stock Beck is a priority area for the Trust - we've being doing various habitat improvements here for 4 years. 2011's work saw 180 tonnes of gravel added to the beck to replace gravel that had been historically dredged. As well as the gravel, large woody debris was added in strategic locations to improve in-stream habitat and 1,600 metres of fencing was erected to protect the banks from livestock. 2000 trees are also being planted to provide bank stability and create a woodland corridor along the stream.

Easington & Hodder Bank

Easington is another area that the Trust has been working on for many years, and this year saw 400 metres of fencing and over 2000 trees planted, all using volunteers! At Hodder Bank, 850 metres of fencing and 1200 trees were planted, again all with the help of volunteers. Similarly to Stock Beck we have created a corridor that we hope will link woodlands together and stabilise river banks to reduce diffuse pollution.

Newton and Knowlmere

The presence of logs and branches in a watercourse can create excellent habitat for fish, invertebrates and otters. The trailing branches and roots can also be utilised to protect banks from excessive erosion. At two sites on the Hodder (Newton and Knowlmere), we identified a lack of habitat and excessive bank erosion. At Newton we utilised trees on the river bank that we carefully felled and placed in the river, while at Knowlmere we used a tree that had fallen into the river that the owner had planned to remove, and instead we secured it to the bank.

Barrow Brook

This year we expanded an existing habitat scheme on Barrow Brook to provide significantly more riparian habitat but also to reduce an area of substantial diffuse pollution. There were over 1000 trees provided by the Woodland Trust and planted by volunteers on this site. We also undertook Himalayan Balsam control.

Cam and Gayle Beck

Last year's investigation into the reasons why Cam and Gayle don't support the wildlife that they should identified a lack of riparian vegetation providing shading, bank stability and habitat as one of the major causes, with the other cause was upland drainage (grips). With the grip blocking being undertaken on Blea Moor, to create a truly holistic restoration project we also undertook a riparian habitat scheme on Gayle and Cam Beck, and will be installing large woody debris next year.

Fish Easements

Numerous weirs exist around the catchment that were constructed during the industrial revolution in order to power mills. However this lasting legacy has affected river ecology by preventing the natural downstream movement of gravel, increasing stream energy causing erosion, and posing barriers to upstream and downstream movement of aquatic wildlife. Removal of weirs is the most preferable conservation action to take, however sometimes they are still in use or the removal may affect surrounding land. In this case, easements or passes need to be constructed to allow movement of aquatic species. During 2011, the Trust built four easements and passes and one weir was removed. As well as this, designs were completed for a further 4 passes, 3 of which will be constructed in 2012.

Cockden Bridge over the River Don near Briercliffe, Burnley.

The footings of Cockden Bridge (possibly an old ford) present a barrier on the River Don. The upper parts of the River Don have excellent habitat and water quality and re-connecting the downstream habitat is a key part of restoring the river.

Before: the impassable weir

After: a series of smaller steps

The confluence of the Calder and Brun in the centre of Burnley

Two fish passes were installed into the existing weirs, achieving the first milestone in allowing fish migration through Burnley and beyond as part of our Urban River Enhancement Scheme (URES).

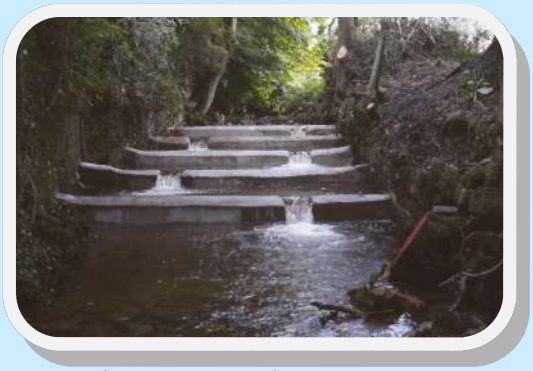
Before: two impassable weirs

After: two fish passes installed

Boyces Brook near Ribchester

Boyces Brook flows from Longridge Fell directly into the main Ribble below Ribchester. A weir which was historically constructed to feed a mill race posed a major barrier. The Trust modified the weir to create a series of smaller steps that were easily manageable for fish in all flow conditions.

Before: the impassable weir



After: a series of smaller steps

Barrow Brook

A weir on Barrow Brook, although not the largest, still presented a barrier to fish and also restricted gravel movement. By removing the weir we were able to provide access to the upper part of the brook, but also facilitate the natural movement of gravel downstream.

Ribble Life

By Jo Spencer

The Ribble Rivers Trust is working in partnership with the Environment Agency to deliver '***Ribble Life'***; a DEFRA funded pilot scheme that will run until December 2012. 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 pilots are being used to bring together different organisations to develop a shared understanding and agreement of what the issues are, how they should be tackled and how we can work together to get the best out of the catchment.

Following a successful launch event held at Brockholes in October 2011, in which well over 40 organisations and interested parties attended, a Community Engagement Officer has been appointed to co-ordinate activity around engaging with local community groups and businesses in particular.

A catchment is an area with several, often interconnected water bodies - rivers, lakes, ground water and coastal waters.

Engagement through delivery

We are currently developing a number of ideas and /or projects that came from the original launch including:

- Identifying and tackling invasive species
- Encouraging local community groups to take responsibility for a stretch of river by taking part in practical activities such as river clean-ups
- Pollution prevention campaigns
- Surveying and monitoring works
- Ongoing physical works including weir removals and habitat improvements

We want to work alongside existing groups and organisations in a way that encourages greater local participation and therefore achieves more for communities and our water environment.

Get Involved

If you have any ideas or know of any local organisations that would like to be involved then please ask them to get in touch.

For further information log onto **www.ribblelife.org.uk** and complete the online survey to tell us what you think about rivers in your area.

You can also follow the progress of the project on Twitter **@RibbleLife**

Contact Jo about Ribble Life on 01200 444452 or email ribblelife@ribbletrust.com

Burnley's Urban River Enhancement Scheme

By Vic Dewhurst

In 2011 the Ribble Trust successfully raised £81,000 through the Heritage Lottery Fund (HLF) to develop our Urban River Enhancement Scheme (URES).

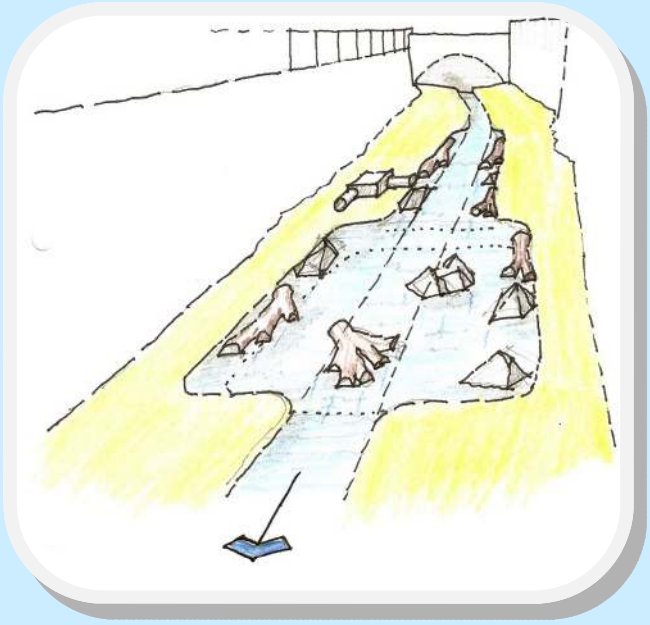
We are currently generating ideas to engage the communities of Burnley in a wide range of activities that will result in a sense of ownership and pride in our River Heritage, as well as meet the significant challenge of river enhancement and wildlife conservation.

With your support and creative ideas for a programme of events, activities and significant physical improvements we will complete the second stage of the application to the HLF. We also hope to secure funding from the Lancashire Environmental Fund, the Environment Agency, United Utilities and The Rivers Trust and in kind contributions from Burnley Borough Council and Hanson Cement, to raise a further £800,000.

If successful, the URES will launch a further two year programme of river enhancement activities in Burnley which aim to:

- Improve river habitat connectivity
- Provide new habitat for riverine species
- Improve the visual quality of the river to encourage more consideration from the communities in Burnley
- Reduce the impacts of activities in Burnley on the rivers downstream

Raceway through Burnley town centre offers poor quality river habitat and acts as a 2.2 km long barrier for riverine species.



Artist impression of new semi-natural river habitat comprising a pool and riffle section approximately 100m in length.

The URES will enable us to construct a new fish pass on the River Brun in Thompson Park, which together with the three passes constructed this year, will allow salmon to migrate from Sea to Source on the Calder and as far up the Brun and associated tributaries as possible.

We will also install a sequence of semi-natural pool and riffle river enhancements throughout the existing 'raceway' of 2.2 kms of river bed paved with cobble and concrete. Currently this poor quality river habitat acts as a barrier and disconnects the natural river habitat above and below Burnley, as well as inhibiting populations of riverine species within the town centre.

Utilising large boulders and woody debris and incorporating areas of gravel we aim to create a wide range of habitats for invertebrates and fish. Constructing otter holts and habitat boxes, we also aim to attract and provide safe homes for wildlife including kingfishers, otters and dippers.

All civil engineering works will be designed to ensure there will be no increase in the risk of flooding and will of course maintain full structural stability of the river channel.

We need your help to ensure URES is a success. If you have ideas for community projects, education initiatives, arts and interpretation or know about the history of the river and how we have used and benefitted from it through the ages we would like to hear from you.

Contact Vic about the URES on 01200 444452 or email vic@ribbletrust.com

Invasive Species

The Invasive Species Project

By Adam Walmsley and Charlie Poate

Invasive non-native species (INNS) are thought to be the second most important threat to global biodiversity after habitat loss. A 2010 report estimated the cost of invasive species to the UK economy at £1.7 billion and their impact is rising. Invasive species may also reduce the ecological status of a river which will jeopardise our Water Framework Directive goals. In the Ribble Valley we have a variety of invasive species, some of which have been here for a long time, others are more recent. Each of these contributes to a reduction of native biodiversity and a degradation of the river environment.

American mink

Mink were released from fur farms and have quickly spread across Britain. They eat fish and compete with native mammals but the biggest threat they pose is to the endangered water vole. Encouraging otters may help to reduce the impact of mink.

To tackle this problem, the Ribble Rivers Trust has set up the Lancashire Invasive Species Project in partnership with the Environment Agency. We have two new invasive species officers working on the project. The first stage of the process is to map all the existing records of invasive species throughout the county. We will then fill in the gaps in these records within the Ribble Catchment by doing some surveying ourselves. There is also a website where people can record their own sightings of invasive species and see their records on the map.

Himalayan balsam

This fast-growing annual swamps out other plants and dies back in autumn leaving the bank bare and at risk of erosion. Balsam spreads by seeds which are flung up to 7 metres from explosive pods. It is best controlled by pulling it out before it flowers.

We are working in partnership with local angling clubs to set up a program of mink surveying and control. In the spring, when the balsam, hogweed and knotweed start growing, we will be going out with volunteers to start taking practical action to control and eradicate these weeds.

How you can help

This project will rely heavily on involvement from volunteers and landowners. We need volunteers to help survey for invasive species, pull balsam and spray knotweed.

We would also like everyone to keep their eyes peeled for invasive species when out and about, and let us know of any possible sightings by recording them at;

www.lancashireinvasives.org

If you are a landowner and have invasive species on your land, we would like to talk with you about how we can work together to control them. Again, please get in contact via the phone number or email below.

Contact Adam or Charlie about invasives on 01200 444452 or email invasives@ribbletrust.com

Angling Passport Scheme

The Angling Passport Scheme was set up in 2010 to bring affordable fishing to all, as well as being a way of illustrating to riparian owners the value of a clean and healthy river. The income that is generated from the scheme is divided between us and the owners of the beats, and our proportion is fed straight back into our conservation work. Other rivers trusts across the UK run this scheme too and the tokens are interchangeable, which is a great opportunity for an affordable fishing holiday! In 2011 three more beats were added to the original four, including the Environment Agency's stretch of the Ribble and Calder at Mitton. We also added Bottoms Beck near Stocks Reservoir which received only six visits over the course of the 2011 season, but with a total of 45 brownies caught between them! Tokens and guides are available to purchase from our website, or you can call into the Aspinall Arms at Mitton where a stock of tokens are kept behind the bar.

A day's fishing on the Passport beats with Paul Proctor, writer for Trout & Salmon Magazine, and Rod Calbrade, professional photographer.

An Angler's Tale

Paul Shorrock of Wilpshire purchased his first five angling tokens at the beginning of the 2011 season. Since then he has returned twice for additional tokens, saying "the scheme is a bargain for the quality of fishing." Here are two accounts of his experience at Mearley Brook.

Tuesday 13th September 2011

"Having been going cabin crazy with all these strong winds and rain I decided to fish Mearley Brook this morning. Before I'd even wet a line I saw a Kingfisher flash by, which I always take as a good omen. I'd caught a few nice small brownies so it was going well. Then I caught a fish I never expected to see in Mearley Brook, a perfect little salmon parr with a deeply forked tail, hard-edged parr marks, a small mouth that ended before the eye, two big spots on its gill covers, a big, pert dorsal fin and no hint of red in its adipose. I tried to get a picture with my camera phone but failed so I hope you can take my word for it!"

Thursday 15th September 2011

"After a morning's gardening I had a reason to visit the recycling centre down Henthorn Lane so I put my rod in the car and had another go at Mearley Brook this afternoon. The water was down a foot on the start of the week and running very clear. I hoped to catch another salmon parr and get a decent photograph and I wasn't disappointed. The first fish was another parr and almost half of the nine fish to hand were the same! The dog-walkers often express surprise when they see me fishing here, and even more so when I tell them it's stuffed with fish!"

Paul added, "I have found Mearley Brook to be the most fishable piece of water under the Passport Scheme, it's also the nearest to me and I think it's a bargain for one token."

PROJECTS FOR 2012

2012 will see the creation of 6 new fish passes, at least 6 more habitat schemes, invasive species control, and farm visits. Below is a taste of some of the work we have planned:






THANK YOU!

The Trust would like to say a huge thank you to all of our volunteers, members and contributors for their enthusiasm and continued involvement in helping the Trust restore and enhance our catchment's rivers.

Planting trees along the riverbank at Montford

Working on Swanside Weir

If you would like to join or volunteer for the Trust please contact us at:
Ribble Rivers Trust, c/o Hanson Cement, Ribblesdale Works, Clitheroe, Lancashire, BB7 4QF
Tel: 01200 444452 email: admin@ribbletrust.com
www.ribbletrust.org.uk