WINTER 2016 ISSUE

From Beck To Beach

Photo by Val Corbett

From the Director...

Well it's been another busy few months for everyone here at West Cumbria Rivers Trust with the added excitement of events and shows to attend! We attended eight of the areas shows starting with Cockermouth in June and finishing with glorious weather at Wasdale show in October. We had a number of activities to grasp people's attention such as measuring pearl mussel shells and calculating their age, making and catching fish (not real ones!) for the little ones and our new badge making machine was certainly a hit with over 350 children making badges of their coloured in pictures of river wildlife. Whilst the children got stuck in to the activities, the staff got a chance to talk to the adults about all the things we do at the Trust and many of our newsletters were handed out for people to take home and read.

A busy tent at the Loweswater Show

We also organised many 'nights on the pull' pulling up the invasive Himalayan Balsam that is invading our river banks. Many of the volunteers learnt how this weed can out compete our native plant species and when it dies back in the winter can leave vast areas of bare river bank leading to increased bank side erosion. You can see people in action in the River Irt project overleaf and we guarantee sunshine for our volunteers!

We also held a number of biosecurity events and working with the big event organisers (such as Keswick Mountain Festival), we tried to educate those involved in swimming in our lakes of the risks of spreading invasive pond weeds such as crassula and pennywort – you never know what might be lurking in your wetsuit!

Bobby Gorst with his picture and the book he bought with his £10 book token.

Also over the summer we launched a competition for children from 5 – 16 years old to design pictures for our new van! The 10 winners all won £10 book tokens and their pictures can be seen throughout the newsletter. Look out for our newly decorated van as we drive around Cumbria!

Another new scheme launched in the summer was 'Offset Your Trek' aimed at the 16 million tourists who visit the Lake District each year to offset their carbon footprint from travelling to the Lakes by pledging £5 to plant 5 trees. The picture here shows the beermats that can be found in most of the pubs in our patch! Tree planting events will be taking place throughout the winter to plant all the trees pledged by the scheme.

We are also launching monthly events at West Cumbria Rivers Trust for people to get involved with their local rivers and lakes. Please see our website for more details of how you can access our events and volunteer with the Trust.

Saving the best until last, we are also very excited to announce that we have extended our patch into the River Wampool and River Waver Catchments in the north of the county and the River Annas in the south. This is to fit with our Catchment Partnerships Programme funded by the Environment Agency. We have even given each area a new name (see our lovely new map!) and we are hoping to run some great new projects in these catchments over the next few years.

The catchments in our care...

Our sincere best wishes to all those affected by the flooding. There will be further information post flood in our next newsletter.

Jodie Mills
Director

Look out for our newly decorated van!

West Cumbria Rivers Trust
Caring for our Lakes and Rivers

West Cumbria Rivers Trust introduces its newest project

Work began this summer on a new three year project on the River Irt. This project is run in conjunction with other partners in Devon, North Yorkshire and Cumbria. The project, entitled 'Restoring Freshwater Mussel Rivers in England', is part-funded by Biffa Award and led by the Freshwater Biological Association.

The small remaining population of freshwater pearl mussels in the River Irt is under great pressure from a range of issues such as increased soil and nutrient inputs. Unfortunately there is no evidence of recruitment of young mussels into the population, therefore the population is declining and its structure is aging. If nothing is done to change this, it is predicted the mussel will be lost from the River Irt within the next 30 years. Issues affecting the Irt will be addressed by fencing off rivers from livestock, planting trees, managing existing trees, reducing soil erosion, tackling invasive species and running voluntary events, to involve and educate the local community

> Unfortunately there is no evidence of recruitment of young mussels into the population

Volunteers get stuck in pulling Himalayan Balsam on the river Irt

The project has got off to a good start and thus far a steering group has been set up, a project plan has been written, introductions to landowners have been made and a river habitat survey has been completed. Fish and mussel surveys have also been completed to track their abundances and locations. Over the coming months the first of the habitat works will be developed and completed in conjunction with the farms and angling clubs.

Two Irt mussels, probably over 100 years old

If you are interested in volunteering our new volunteer work parties run every second Wednesday each month in conjunction with the National Trust, please contact Chris West the River Irt project officer:
e: chris@westcumbriariverstrust.org
t: 017687 44347

Supported by:

Biffa Award
Building communities. Transforming lives

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Freshwater Biological Association

Our Education Projects – now in full swing...

How long can a freshwater pearl mussel live? That is one of the things you would learn in a Pearls in the Classroom (PiC) session, as well as much much more about mussels and their habitat. (In case you were wondering the answer is well over 100 years!!)

A School pupil using the GoPro camera to film the mussels, images are immediately seen on the tablet on the bankside

PiC is an educational program designed to teach kids about one of our most critically endangered animals, whose last stronghold in England is right here in West Cumbria.

An indoor session comprises a presentation, activities and a work booklet. Those able to get out to the river, accompanied by a specially licenced mussel expert, get to see the mussels underwater using a GoPro camera and a bathyscope (the orange bucket thing in the photo!).

Sessions are completely free, so if your school is interested please don't hesitate to get in touch. e: philippa@westcumbriariverstrust.org t: 017687 44347

pearls in peril | Life | NATURA 2000

School children using the bathoscope to see mussels on the river Ehen

River Derwent Habitat Improvement Project thanks United Utilities and partners


Gravels provided for spawning fish to lay their eggs in.

Following a successful application for £20,000 to United Utilities Catchment Wise Fund, WCRT in partnership with the Environment Agency, the Rivers Corridor Group, Keswick Anglers, Woodland Trust, Lake District National Park and key landowners pulled together in order to tackle habitat improvement projects on the River Derwent. Excessive bank erosion, poor in-river fish habitat and lack of spawning gravels in a key tributary between Derwent Water and Bassenthwaite Lake Site of Special Scientific Interest (SSSI) were identified as the main issues affecting water quality and depressed fish populations.


Woody debris to provide protection from erosion and a habitat for fish.


Fencing to stop animals eroding the banks and trees planted to provide bank stability, 'slow the flow' of water and provide a wildlife corridor.

The collective aim of the project is to help reduce the decline in Atlantic Salmon and reduce the nutrient and sediment load, which increases the amount of phosphates entering our watercourses and has a significant effect on water quality. The partners generosity in both time and monies increased the final spend by a further £23,000.

With the full co-operation of the landowners, seven projects have been completed over the last 12 months. The techniques used to help our river included the erection of 1000m of stock proof fencing and planting of several hundred trees along the river banks in the newly created buffer strip.

In addition, trees leaning into the river have been felled to prevent them falling in and creating significant bankside erosion. Small trees and large branches have been secured at key locations by stainless steel wire to the living stumps to provide protective wooded debris and an ideal habitat providing cover from predators for the young fish!

Locally stored river gravels have been used to restore sections of Lair Beck, approximately 120m in a 500m stretch. Lair Beck, after decades of dredging, was devoid of gravels in the middle and lower reaches. Without spawning gravels, fish can't lay their eggs and reproduce. With the channel now restored it is expected salmon, trout, stone loach, minnows and brook lamprey will benefit from our assistance.

Fortunately very little damage was caused to these projects in the recent floods.

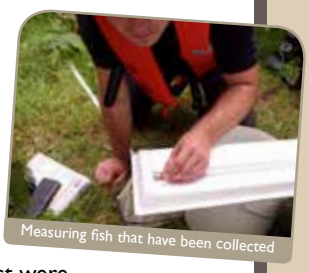
Volunteers get stuck in with our summer electrofishing programme – John Harrison tells all.

I spent a month at West Cumbria Rivers Trust as part of a BSc in Aquaculture and Fisheries Management. The work involved carrying out the first year of the electro fishing programme to monitor populations of fish in the rivers, particularly Salmon fry. A five minute quantitative survey was carried out with species counted and measured. Sites such as the Glenderamackin had ideal habitat for Salmon fry and high numbers were found. Other sites like Tongue Gill had very little habitat for fish and hence the numbers of fish were much fewer. There was no woody debris or cover from predators and as another volunteer I worked with said, 'It's like a house without a roof'. The results, due out in the New Year, will give the Trust an idea of where habitat improvements are needed to encourage fry recruitment.


John with the National Trust electrofishing in Buttermere

Visitor engagement with local people at a sunny Cockermouth showground enabled me to meet local people and discuss conservation issues. My summer with the trust also saw me learning other new skills and I carried out a fish rescue and treated Japanese Knotweed with pesticides using stem injection, under the expert guidance of the Trust staff.

Working for West Cumbria Rivers Trust was a fantastic experience learning how to conserve and restore the rivers to their natural state and will help me to progress my studies further on my University course at Sparsholt College.


Measuring fish that have been collected

The team at the Trust were very welcoming and I look forward to returning next year to undertake the electrofishing programme and increase my knowledge and skills in river conservation.

John Harrison WCRT Volunteer.

The Trust would like to thank The River Corridors Group, Derwent Owners Association, Cockermouth Anglers, Keswick Anglers and Isel Fishing Association for their valued support and funding to be able to run the project, along with all the volunteers who helped carry out the survey.

The Trust celebrates the end of another successful Project

This autumn saw the Loweswater Care Programme come to an end. This was a two and a half year partnership project funded by DEFRA's Catchment Restoration Fund to improve the water quality in Loweswater. Over the past few years, Loweswater has suffered from blue-green algae blooms because of the high level of nutrients which run into the lake from the surrounding catchment, and one of the main aims of the projects was to reduce the levels of these nutrients.

Before: Open muck heap, next to housed cattle with dirty water runoff issues

A substantial amount of work has been completed within the catchment to tackle this. Working mainly with the local farming community the project has part-funded several large-scale farm infrastructure projects to improve the handling and management of muck and dirty water run-off from local farmsteads. For example a new slurry store roof and cattle feeding yard roof at one farmstead will prevent around 32 tanker loads of rainwater getting into the slurry store – this means that there is now plenty of capacity to store slurry all winter long and to spread it in the spring growing season when the conditions are right and the nutrients will be fully used by the growing grass. Prior to the roofing projects, around 1/3 of the volume of the slurry store was spread in winter when it is more likely to be washed off the land into the watercourse and ultimately into the lake.

"We are delighted with the support from the local farming community"

Another two projects included new housing for cattle, which removed cattle from an existing farm stead that had poor facilities for managing dirty water runoff and relocating them into new housing where there was already a sound system in place for managing runoff.

After: new cattle housing, with covered muck storage area and dirty water collection tank.

We are delighted with the support from the local farming community who have all been keen to work with the project, many of whom contributing a substantial percentage towards the cost of the improvements.

Detailed monitoring undertaken for a number of years, both as part of this project and previous projects, will be continued thanks to support from the National Trust. We hope that over time this will demonstrate positive changes in the lake as a result of this work – watch this space!

defra | National Trust | A clear solution for farmers – CATCHMENT SENSITIVE FARMING

What is it?

The grub effectively sticks stones and sticks to itself with silk to form a refuge before emerging as an adult.

For those of you that have dogs to feed my first response was, "It looks like Winalot Chum!"

But our Trustee David Calvert assures me this is a Caddisfly larvae found in our rivers in West Cumbria…

Our freshwaters support a great variety of natural life and one of the most diverse biological orders is the caddis or sedge flies. Caddis will inhabit just about any waterbody which is not grossly polluted & have been around for a massively long time with fossil records containing around 500 species dating from the Triassic period (c 200 million years ago). The current British list has around 200 species which vary greatly in size with wing lengths from 2mm up to 30mm: all have a life cycle comprising egg, larvae, pupa and adult. The first three stages are aquatic followed by an adult terrestrial stage when the essential courtship, mating and egg laying takes place. Almost all make some kind of case or refuge at some stage in their life cycle (see picture): during the pupal stage which lasts around two weeks the animal reforms itself inside its case to form a grub before emerging as a replica adult.

The adult Caddisfly

If you are interested in insects the Trust is hoping to develop a Riverfly Partnership Initiative which provides a simple monitoring technique for insects which can then be used to detect any severe perturbations in river water quality. Please keep an eye on our website for more information.

Competition Winners

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