

# From Beck To Beach

The newsletter of West Cumbria Rivers Trust

## NEWS IN BRIEF

### A warm welcome to Annabelle and Jo



We are delighted to welcome Annabelle Kennedy and Jo McCurrie to our team. Annabelle is our new Natural Flood Management Project Officer covering the

Cocker catchment (Loweswater, Crummock and Buttermere). She recently worked for Morecambe Bay Partnership, and previously with Wildlife Trusts managing a variety of conservation projects and nature reserves. She studied for an MSc in Protected Area Management, and also gained post-graduate qualifications in Bird Conservation & Ornithology and Biological Monitoring & Species Identification.



Jo joined us as an intern in September 2018. Jo has a BSc in Zoology from Edinburgh University and an MSc in Sustainable Water Management from Lancaster University

and, having spent a long time raising her offspring, is keen to return to conservation and biology. She is looking forward to working with different members of the Trust, hopefully helping out and gaining all sorts of fabulous experience.

### Fond farewell to Becca

We are very sad to lose our amazingly fabulous Education Officer, Becca Neal, as she leaves us to



join her partner back down south. She has inspired so many young people and volunteers and we wish her the best of luck in the future.

### Watch this space

The team were very busy with funding applications throughout the year, including bids to the new Water Environment Grant, which is run by DEFRA with funding from the European Agricultural Fund for Rural Development. We have submitted a number of exciting partnership project proposals to support delivery work over the next three years in line with our catchment plans and are now keeping our fingers crossed for some success. We find out soon - so watch this space!

### Dash Beck

We are delighted to have received over £4,000 from the Lake District Foundation and Lake District National Park Authority's Communities Fund for works to improve the habitat of Dash Beck, near Bassenthwaite. The project is in partnership with Bassenthwaite Rotary Club and will address issues identified on our walkover and fish surveys by reducing sediment inputs to the beck and increasing habitat diversity. Works will include stabilising the eroding bank with natural materials, coppicing bankside trees to allow more light to reach the river bed, pulling up non-native invasive Himalayan balsam plants, fencing off the beck from surrounding farmland and maintaining the footpath alongside Dash Beck.

### Advent window

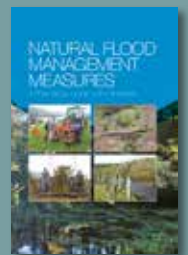
We have once again entered Keswick Tourism Association's Christmas Advent Window Competition at our office on Lake Road in Keswick. Our Director was up all night making

pallet christmas trees, which St Herbert's school decorated with their fabulous artwork and the pupils also sang Christmas carols at the grand unveiling. We hope to win again this year - please vote for us online at: [www.visitkeswick.com/whats-on/keswick-live-advent](http://www.visitkeswick.com/whats-on/keswick-live-advent) Voting opens on Christmas Eve!



### Natural Flood Management Handbook

With the support of partner organisations in the Cumbria Strategic Flood partnership, we have produced a practical guide to Natural Flood Management for farmers and landowners. The handbook details how to implement all the different methods used to reduce downstream flood risk, from cross drains and soil improvements to bunds and ponds. Details are given on how to implement measures, where to find advice, what funding might be available and benefits to farm businesses. Copies can be picked up from our office or downloaded from our website.



# Natural Flood Management Projects

We've been busy over the last few months with four Natural Flood Management (NFM) projects that aim to reduce downstream flood risk and also deliver other environmental benefits, including habitat and water quality improvements. This summer we started scoping out NFM measures in both the River Glenderamackin catchment upstream of the 'at (flood) risk' community of Keswick and in the River Cocker catchment upstream of the communities of Lorton and Cockermouth, both projects funded through a special DEFRA NFM fund.

Working with partner organisations, we're currently in the scoping stage; this means we're out and about talking with landowners in both catchments, looking at possible interventions on the ground. This includes things like tree planting, creating kested (embanked) hedgerows, improving soil structure, building leaky barriers and creating water storage areas within the catchments. Interventions must work for the landowners, so in most cases this means they won't significantly impact on the farm business, and some measures can have a positive impact.

We've already completed scoping for a similar project in the catchment upstream of Flimby,

again funded through the DEFRA NFM fund, and have had a good level of support from local landowners for delivery of interventions in the catchment. We're hoping to start delivering a range of NFM measures over this coming winter; these include water storage areas, kested hedgerows and leaky barriers.

Meanwhile, in the south-west of our area we're also looking at the potential for natural flood management to reduce flood risk to Bootle village, whilst also improving the environment and water quality of the River Annas catchment. With funding from the Woodland Trust and the North-West Flood and Coastal Committee's 'Slow the Flow' fund we have started to work up some exciting projects with landowners including water storage areas and leaky barriers.

For all of these projects, but in particular the DEFRA NFM funded projects, a key requirement is to monitor the effectiveness of NFM measures for different benefits, to help address some evidence gaps at a national level. We're pleased to be working closely with Lancaster University, JBA, and The Rivers Trust as part of a Natural Environment Research Council (NERC) project, and also Durham University, alongside project partners



and community groups to undertake some detailed monitoring of NFM measures across the catchments.

Each of these projects has a local working group to oversee the delivery work, which include representatives from local communities as well as a range of organisations including non-governmental organisations (NGOs) and flood risk management authorities. If you are interested in finding out more about this work, or have some land you would like us to have a look at with NFM in mind, then do get in touch with us.



## River Restoration update

We're thrilled to have recently won the Wild Trout Trust's (WTT) "Large Scale Habitat Enhancement Scheme" award, for our partnership project 'Ennerdale Mill Weir Removal' delivered with the Environment Agency, Natural England, James Fisher Nuclear, Marine Management Organisation, AECOM and Ebsford Environmental. Our partnership spent three years monitoring the site in Egremont and devising the most effective strategy to remove the failing weir, culminating in demolition works in June 2018. After 7 weeks of very careful removal works, meticulously managed to ensure no pollution damaged the nearby Freshwater Mussel colonies, works were completed, leaving behind a naturalized section of the River



Ehen and a much healthier riverine habitat. Our next phase of works will be to plant more trees along the riverbanks and then continue our monitoring of the entire site. For example, we are regularly photographing the former weir using fixed-point photography, which will show all of the multiple changes to

the river bed, banks and ecosystem over the next 12 months. In 2019 we'll collate all of the images to make a unique short film!

We're delighted to have been recognised for all of the hard work our colleagues, partners and volunteers have put into this project, and for the opportunity to showcase the talents of WCRT staff at a national awards ceremony. Our thanks of course go to the WTT for presenting this award to us, and to all of our partners for their assistance throughout this project. Now with our eyes to the future and following the success of the weir project, we're currently progressing a river restoration project, with the Environment Agency, on the River Keekele near Whitehaven, which involves removing a plastic liner from over 2km of watercourse. We're also planning to re-meander a section of the River Cocker near Lorton, which will provide flood-risk benefits to the local community; both of these projects are scheduled for delivery in 2019. We're also in the early days of investigating the possibility of further weir removals across the catchment... our river restoration team are busier than ever!



# River Ehen Compensatory Measures Project

United Utilities (UU) owns approximately 70 hectares of land along the upper reaches of the River Ehen in Ennerdale. The land is managed in partnership with Natural England and the Environment Agency and also falls within the remit of the Wild Ennerdale Partnership.

The management aim of the land is to provide a healthy natural environment that supports the sustainable recruitment of the freshwater mussel (*Margaritifera margaritifera*) and Atlantic salmon (*Salmo salar*) in the River Ehen.



A low-intensity land management approach is being delivered, with support from West Cumbria Rivers Trust, through the 'Compensatory Measures' project. In line with Wild Ennerdale Partnership's aspirations for the wider valley, the intention is to restore natural ecosystem processes, which means allowing nature to provide functioning water and mineral cycles, increased species diversity, and maximising the use of the sun's energy to drive all these processes, locking up carbon in healthy soils.



Recent activity on UU land includes the installation of willow 'leaky dams' in several ditches to capture silt and allow clean water through to the river. Approximately 6km of old fencing has been removed, 2km of which was with the help of local and Wild Ennerdale volunteers. Volunteers also helped with monitoring 2,500 trees and planted an additional 1,000 trees including; Rowan, Birch,

Crab Apple, Aspen and Dog Rose. These provide a range of food and habitat for wildlife along with a multitude of other benefits.

A local public event was held in September where Diane O'Leary led a walk and talk session on site to share information about the management of some of the land. There will be another similar event organised in the Spring which will be publicised locally.



## Magic of Soil

(notes from a talk by Professor Phil Gregory, University of British Columbia, organised by Penrith Action for Community Transition on 24<sup>th</sup> October 2018 - Newton Rigg Campus)

Did you know that Earth is the only planet not named after a Greek or Roman god or goddess? Let's assume that this is in recognition that the earth or soil beneath our feet is core to our survival. As any farmer or grower knows, getting the soil right is key to successful crops or pasture.

Currently soil is being degraded at an alarming rate and according to top soil experts across the globe, we only have 60 years of fertile soil remaining. Our soils



are becoming so depleted of structure and nutrients that they are struggling to hold water and maintain fertility.

The Magic of Soil talk touched on some fascinating facts and looked at possible solutions. Good agricultural management of soils is key, as carbon is stored in our soils. Ploughing releases that carbon into the atmosphere as carbon dioxide, and damages the micro-organisms which enrich the soil. Various technologies, old and new, are being researched and promoted, many of which can also save money and resources. These include direct drilling instead of ploughing, providing a cover crop between growing seasons and thereby keeping nutrients locked in, adding good quality compost and rotational grazing of livestock. This is all relevant to Natural Flood Management, as the better the quality of the soil, the greater the infiltration and water-holding capacity.



As we move away from the Common Agricultural Policy and into a new era of agricultural support, the role of farm features in storing water and nutrients, good management of water courses and surface water, and keeping soil in good heart is expected to become more prominent.

A film about soils and related issues can be found at: [www.penrithact.org.uk/the-magic-of-soil-lecture-oct-2018](http://www.penrithact.org.uk/the-magic-of-soil-lecture-oct-2018)

## Our catchment areas

We undertake a wide range of exciting projects from education to conservation, volunteering to research, across four different river catchment areas:

The Derwent, the Ellen, Wild Rivers (which includes the Ehen, Calder, Irt, Mite, Esk and Annas) and the Wampool and Waver.



### What is it?

Two brook lamprey (*Lampetra planeri*) of course! Although typically a grey-brown in colour (see top lamprey), occasionally a golden form with a very much reduced pigment exists, similar to albinism (see bottom lamprey). It's worth noting these are brook lamprey and not river lamprey. Adult brook lamprey can be distinguished from the otherwise very similar river lamprey by their size: brook lamprey are slimmer than the diameter of a pencil and seldom exceed 15 cm in length; whereas river lampreys, that have left the sea to head up rivers and streams to spawn, generally measure over 25 cm in length. A small river lamprey that has arrived in a spawning stream can be easily confused with a large brook lamprey. The key differences are in the teeth; brook lampreys are blunt, while river lampreys are sharp. Also the two dorsal fins are more closely connected in the brook lamprey than in the river lamprey. Sometimes the help of a microscope can be needed to distinguish between river and brook lampreys found in our rivers and streams.



## Volunteering

West Cumbria Rivers Trust would like to thank all of the volunteers who have helped us in 2018. Anyone that has volunteered in any capacity is welcome to join us on Thursday 20th December for a litter pick near Keswick followed by a thank you lunch. For more information and to book your place, please contact [philippa@westcumbriarivertrust.org](mailto:philippa@westcumbriarivertrust.org) or call 017687 75429.



Keep an eye on our website [www.westcumbriarivertrust.org/support-us/](http://www.westcumbriarivertrust.org/support-us/) volunteer for more information on our 2019 Volunteering Programme and don't forget to sign up to our mailing list for monthly updates.

If you'd like to find out more about volunteering with us please see our website at: [www.westcumbriarivertrust.org/support-us/volunteer](http://www.westcumbriarivertrust.org/support-us/volunteer) or contact: [philippa@westcumbriarivertrust.org](mailto:philippa@westcumbriarivertrust.org)

