

East Yorkshire Chalk Rivers Trust

Trust expands its role to Derwent

The Trust has recently taken on the task of improving the River Derwent. The Derwent catchment is the largest catchment in Yorkshire and includes a great variety of habitats and species of plant and animal. It is highly valued in some parts as a Special Area for Conservation (SAC) and there are several Sites of Special Scientific Interest (SSSI). Parts of the catchment lie within the North York Moors National Park and the Howardian Hills Area of Outstanding Natural Beauty. This requires a delicate balance to be maintained between exploitation and conservation, preservation and enhancement of the local environment. The Trust is starting to work with many different interest groups to tackle problem areas.

Connectivity within the river corridor and their habitats both in regards to riparian habitat and aquatic migration is an important issue in order to facilitate natural processes to take place and enable the diverse flora and fauna to complete their life cycles. One issue that the Trust will be addressing is fish passage at various man-made structures that prevent many fish from reaching their preferred areas that enable their natural life cycles to be completed. For instance, river lamprey is one of the species for which the lower Derwent is designated as a SAC. These migrate to sea to feed as adults, but have their breeding and nursery areas in freshwater. They need gravel on which to spawn, but their larvae live in silt, so the adults need to migrate to particular areas to breed. Weirs, locks, sluices and pumps can all hinder these migrations in both directions and so affect population numbers. This is true for other migratory fish species, such as salmon and eel, but hindrance of population movements can also affect numbers of fish species totally resident in freshwater. Eels have seen a dramatic crash in their population numbers over the last decade, partially, it is thought, to increasing barriers to migration. Reduced numbers of eels also means that there is less food to support populations of other animals of conservation importance, such as otters and bitterns, that favour eels as food.

Other organisations have been drawing up plans for restoring the ecological status of the Derwent catchment for some time and have already started work in some areas. Besides the actions noted above, the Trust will work in partnerships old and new to deal with such problems as:

- Controlling invasive alien plant species;
- Reducing soil erosion and controlling sediment inputs to the river channel;
- Restoring habitat diversity in the river channel and habitats suitable for water voles and crayfish;
- Creation and management of flood plain wetlands and wet woodlands;
- Restoring links to and from side channels, tributaries and flood plain water bodies with the main river;
- Encouraging farming and business practices that maintain good water quality, improve riparian habitat and reduce abstraction.

These tasks will need a great deal of assistance to achieve, so we'd love to hear from you, especially if you may be able to help with any of these tasks, as a landowner in the Derwent catchment or would be prepared to assist the Trust in any other way.



Barmby Barrage – where the Derwent joins the River Ouse. There are migration issues with this structure

Left: The weir at Kirkham Abbey on the Derwent

EYCRT Nets £3000

Centrica Storage has awarded the Trust £3000 as part of the Caythorpe Environmental Support Fund. The £5000 per year fund, which was set-up during the Caythorpe Gas Storage project approval process, will generate £125,000 over 25 years for qualifying environmental projects in and around the East Riding villages of Boynton, Burton Agnes and Boynton.

The funded project will involve a detailed species and habitat recording on the Gypsy Race in Boynton and Rudston parishes, followed by targeted habitat works. The Trust also aims to plant around 50 bankside trees and install 15 nest boxes. Invasive species control will reduce such distribution along the watercourse, benefitting native flora and fauna. By comparing baseline monitoring with repeat surveys, positive change will be captured. Increased tree cover will stabilise banks, provide more constant water temperatures and aid aquatic fly life. Reduced invasive species will directly aid native species recovery.

David Croft, representing East Yorkshire Chalk Rivers Trust, said: "On behalf of the Trust, I am very pleased that Centrica Storage decided to allocate £3000 towards our work in and around the Gypsy Race. The funding will certainly help from a sustainability perspective whilst having a positive environmental impact in a number of areas. We intend to put the money to good use so that we can both preserve and improve what is one of the area's most beautiful hidden gems."

Glenn Sibbick, Project Director at Centrica Storage Limited, added: "East Yorkshire Chalk Rivers Trust does some fantastic work across the East Riding of Yorkshire. We are delighted to support this very worthwhile initiative and we look forward to seeing the outcome of the team's work over the coming weeks and months."

The project is anticipated to take a year to complete, and has support from the Environment Agency, Natural England, Yorkshire Wildlife Trust and the East Yorkshire Biodiversity Partnership.

David Croft (left) alongside Don Reid, Centrica Storage's New Asset Manager



NEW MEMBERS JOIN THE TRUSTEES

The Trust welcomes two new members to its governing body, both who have a wealth of experience in fisheries work having worked in the past for the Environment Agency.

Dr. Steve Axford

I am just retiring from the Environment Agency after over 36 years with the Agency and its predecessors, spending all of that time as a fisheries scientist, including managing small teams of fisheries scientists.

I have worked extensively on rivers throughout the whole of Yorkshire and also a large number of still waters. I spent a number of years in conjunction with others examining the fisheries problems of West Beck and have probably surveyed all the streams in the EYCRT area at some time. In recent years I have worked at a national level, as Principal Scientist dealing with all aspects of fisheries science. I recently managed five research projects for the Agency, including the FORECASTER project, which is all about case studies of river restoration and is being run by HIFI as the senior European partner.

I have a PhD relating to fisheries management and am a Fellow of the Institute of Fisheries Management and a Chartered Environmentalist. I have completed many training courses over the years, most recently passing as a PRINCE2 Practitioner (Projects in a Controlled Environment, run under the auspices of the Office of Government Commerce).

I have a modest number of publications to my name. Topics include water quality and the restoration of salmon rivers in NE England, use of angler catches for monitoring and effects of weirs on movement of all fish species.

It would be nice to get back to some field work as well as driving a computer! **SA**



John Shannon

Almost all my working life has been immersed in more ways than one in fisheries work. I started with YWA in 1975 as Assistant Hatchery Manager at High Costa Mill in Pickering, at that time producing brown trout to stock into North and East Yorkshire's rivers. I then progressed my career in the broader Fisheries Department involved in all of the fields of fisheries work. This entailed enforcement in all its aspects of salmon work – sea, coastal and river. Carrying out fisheries stock management and manipulation in the many still waters within North and East Yorkshire also proved interesting and an enjoyable learning curve. I have been involved in fisheries project identification and management from full river systems to smaller tributaries. This has led to working with many different interest groups and on more than one occasion winning the Wild Trout Awards, which recognise at a national level successful projects that have provide a measurable improvement to the overall aquatic environment. I take it as a great compliment to join the trustees and be able to work with the members of the Trust to broaden and enhance my life's work. **JS**



WORK ON LOWTHORPE BECK

The Trust have become involved with of Lowthorpe Beck on two sections that are overwide and heavily silted, and due to the historical maintenance the bank profile is high with little or no marginal habitat.

The proposal was to create a berm section of about 60 metres in length to follow the high bank round the bend in the river. The materials used to create the new bank line were available on site as an encroaching section of alder carr had been removed. Green engineering techniques were used to form the new margin line. Some of the soft organic silt in the old river channel will be used to fill behind the alder faggots helping to establish the newly created margin.

Upstream of the project site was a low timber weir – this has been removed following the re-sectioning work enabling the river to return to a more natural state.

On the day following the work on this bank many tracks could be seen in the soft mud. These were identified as being made by an otter. Natural plant recolonisation will be encouraged on this bank as seeds from many of the local species will be contained in the silt.

Part of a capital farm scheme between Natural England and the Trust at this site in 2009 was to fence 300 metres of the river, to prevent stock trampling the banks.

The scheme also provided alternative stock watering from troughs filled from a bore hole on the farm site. Formally, drinking points were sited along this chalk stream where cattle were allowed to drink from the river. The aim of this project was to narrow the river at the site of a former drinking bay.

To further enhance the site it is proposed to leave the bay at the field side of the new bank. This will form a permanently marshy area that will benefit birds and invertebrates near the stream.



The constructed causeway was backfilled with silt from the river channel using a long-armed excavator

Below: The new bank was allowed to dry out and the surface raked to encourage natural plant germination



Water Forlorns Project

Following a long period of public consultations the planned improvements to this urban chalk stream were started during May.

The compacted gravel bed was raked and the loosened stream bed was created into a meandering form. Pre-planted coir mattresses were secured to the stream bed to accentuate the new sinuous channel.

The final part of this first phase will be to fix several bird boxes to the old brickwork bordering the stream. This is to enhance the present wagtail nesting sites along this urban watercourse.

The work was undertaken with the help of the Environment Agency, Yorkshire Wildlife Trust and Bishop Burton College students.

The project site is due to be surveyed early in 2012 to measure the effects of the improvements and any changes to the spawning of the native wild brown trout population.



Bishop Burton College students and Yorkshire Wildlife Trust volunteers working at Water Forlorns

3rd National Riverfly Conference

The conference, held at the Natural History Museum in March was very well attended by delegates from all parts of the UK. Speakers covered a wide range of topics relevant to aquatic invertebrates and the health of our rivers.

The keynote speech by Lord Smith of Finsbury (chairman of the EA) stressed the magnitude of the task ahead of us. With only 27% of UK rivers in Good Status, 58% failing re-fish populations, the probable impacts of Global Warming on river flows and a 25% cut in EA budgets, he stressed the increasing importance of constructive liaison between volunteers and the EA. He was however optimistic, pointing out that there were already 35 River Trusts putting in 7000 volunteer days per year, plus another 600 Riverfly AMI volunteers, a mammoth input compared with what the EA alone could achieve.



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How partnerships get the job done

The fisheries students at Bishop Burton College have been working with the East Yorkshire Chalk Rivers Trust for a number of years and have taken on many diverse and interesting projects. In the past years we have undertaken weed cutting (in a blizzard), cleared encroaching birch and alder trees from a SSSI, added meanders, narrowed sections of beck, removed and re-profiled weirs, reinstated banks lost to cattle poaching as well as various habitat improvement schemes.

For both the Trust and the College this is a real win-win situation – the students get to gain invaluable experience of practical river management and, at the same time, achieve a number of learning outcomes to help them to pass their course. The partnership with the College allows the Trust to take on tasks that they may otherwise not consider. There are real gains for the Trust in being able to call on a group of willing volunteers (who come fully equipped with tools and waders as well as staff to work alongside them), who get jobs done in good time and to a very high standard. They also don't mind working in the worst of weathers!

The students really enjoy these projects as it allows them to develop skills such as spiling and the use of woody debris as well as benefitting from the years of experience and knowledge from the members of the Trust they work with. We will also visit projects after completion to look at the progress and to identify the ways in which it has improved the water in question.

One of our joint projects was the creation of a shallow berm and narrowing of a wide section of Lowthorpe Beck mentioned earlier. The students had to drive in two rows of stakes to create the new bank line; they then used the tree material to infill between these posts to make a solid bank. This generated some excellent team working skills as the materials were on one bank and the students on the other. With the Trust they devised an ingenious rope pulley system to ferry the materials from bank to bank.

Once the banking was completed the students moved on to the second part of the project. As part of the planning consent it was agreed that the weir upstream would be removed.

This project allowed the students to gain an insight into both the planning and execution of projects and also how using sustainable materials and techniques helps to limit the impact on the environment as well as minimising costs. We are already planning our projects for the next academic year. Both I and the students can't wait.

Paul Coulson



Showing the before and after stages of the second project on Lowthorpe Beck

Trust Fish Project

This year six schools are participating in this educational programme. The participating schoolchildren are able to see the growth and development of brown trout and eventually help with the release of the fish into suitable local streams. School interested in the programme should write to the Trust or visit their website on www.eastyorkshirechalkriverstrust.org

Contact the Trust at East Yorkshire Chalk Rivers Trust, 1 Riverside, Driffield, YO25 6PA.

Pupils from Cherry Burton and North Frodingham Primary Schools learn about chalk stream habitats from Trust members



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