

# Fisheries newsletter

Wessex and Devon & Cornwall

April to June 2014

This newsletter is a quarterly update on some of the fisheries work undertaken by the Environment Agency and other partners including the Rivers Trusts, within Wessex and Devon & Cornwall

## Investigations on the Biss and Frome

Mike Blackmore of the Wild Trout Trust has been investigating the River Biss, Wiltshire and Bristol Frome to try to understand why the fish populations (especially the brown trout) are failing under the Water Framework Directive (WFD). We funded this work through a national project and it will help to pave the way for future projects in the catchments that aim to improve the fish populations through habitat improvements, or barrier removal or modification. This will also be a great way to increase local awareness and interest in the river.

*For more information on the Biss and Frome investigations, please contact Jody Armitage, Fisheries & Biodiversity, Environment Agency, Tel: 01278 484655, or Email:*

[jody.armitage@environment-agency.gov.uk](mailto:jody.armitage@environment-agency.gov.uk)

## Retyn bridge works help fish passage

Emergency works by Cornwall Council were required to repair a seriously undermined bridge at Retyn on the River Gannel, which had to be closed to traffic. With a swift turnaround, we helped guide the emergency bridge repairs at Retyn to include improvements to aid upstream passage for sea trout and brown trout using a rock ramp, and for eels by installing a sloping ramp of eel tiles. We supplied the eel tiles. Access for migratory fish and eels has now been much improved to the five miles of high quality riverine habitat found upstream of Retyn bridge.

*For more information on the River Gannel and improved fish passage, please contact Robert Hurrell, Fisheries & Biodiversity on Tel: 01208 265093, or Email: [robert.hurrell@environment-agency.gov.uk](mailto:robert.hurrell@environment-agency.gov.uk)*



The undermined bridge at Retyn on the River Gannel (a) and the newly installed rock ramp and eel pass (b)

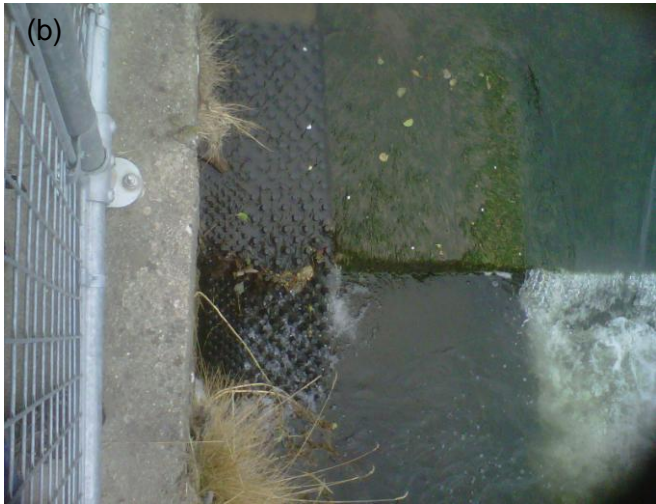
## Braunton Burrows eel pass installed

A partnership project between the Environment Agency and the Inland Drainage Board at Braunton Burrows Site of Special Scientific Interest (SSSI) and Special Area for Conservation (SAC) in North Devon, has created an eel pass on Velator Weir and the 'Great Sluice'. This opens up a significant area of excellent habitat for both juvenile and adult eels.

## Fish rescue on the River Kenn

We undertook a fish rescue on the River Kenn, just outside Exeter in East Devon. This was because

our Flood and Coastal Risk Management (FCRM) team had to repair the flood defences, which involved diverting a watercourse. A significant number and wide variety of game and coarse fish species were relocated downstream by our fisheries staff with assistance from our Sampling and Collection team.



**Velator Weir before the eel pass was installed (a) and the top of the eel pass showing the eel tiles that were used (b)**

### Assisting fisheries in North Wessex

In North Wessex, we have had a busy time helping local fisheries with management advice and assisting during fish mortality investigations. We have been working closely with the fisheries involved and with our Fish Health Team in Brampton and the Fish Health Inspectorate to quickly identify what could be causing the loss of fish and to ensure suitable measures are put in place to protect other fisheries in the area.

If you are worried about possible fish disease outbreaks then contact your local fisheries officer or call our Incident Hotline on 0800 80 70 60. Also, if you just want some fisheries management advice then please contact your local officer.

### Helping at Bideford Angling Club event

We assisted at an angling event in North Devon run by Bideford Angling Club. We have in the past assisted the club to improve facilities to enable them to take on more members. The club are now running events each year with schools in the local area to try and encourage more children to take up the sport. This year, events were run with South Molton Community College and Bideford College. Paul Carter our local fisheries officer assisted by helping provide some of the necessary equipment and also supporting on the day to help the children learn to fish.

### Progress made with eel regulations

As a result of the eel regulations, our programme of work on FCRM assets is underway. Feasibility work has started for our critical structures. In Devon, there are six structures that are currently being considered:

- Ayleston Brook (near Modbury in South Devon): considering removal or modification of tidal flap.
- Coney Gut (in Barnstaple, North Devon): installation of eel friendly tidal flaps and an eel pass.
- Bradiford Water (Barnstaple in North Devon): installation of eel friendly tidal flaps
- Turf Locks (near Exminster on the Exe Estuary in Devon): complex arrangement into flood storage area, likely to install modified tidal flaps.
- Wotton Brook (near Exmouth in Devon): installation of eel friendly tidal flaps.
- Kenwith Stream (near Bideford in North Devon): investigation into 'fish friendly' pumps and other solutions.

The feasibility report will go out for contractors to tender later this summer with a view to completion of all construction work before March 2015.

### Delivering a bit of everything...

Since 2013, we have been working with our partners (Wessex Chalk Stream Project, Wiltshire

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## Twitter lands in Wessex

Our fisheries teams in Wessex have joined the modern technological age and have a new Twitter account: [@WessexFishEA](https://twitter.com/WessexFishEA). If you want to find out what we get up to during the week then please follow us. We will be posting information on fisheries enforcement activities, fish surveys, site visits and anything and everything fish related.

## Updates from the Rivers Trusts

### Westcountry Rivers Trust (WRT)

#### *Reconnecting the Polgooth Stream*

The Polgooth Stream is the largest tributary of the St. Austell River, and has been heavily affected by historic tin streaming and more recent china clay extraction. This has resulted in many of the streams in the area undergoing significant change and facing multiple pressures, including impacts from mine waste and morphological changes to accommodate roads and drainage works. However, since decommissioning of the china clay driers around five years ago, the water quality has greatly improved

Recent Environment Agency fisheries survey data suggested that salmonids were absent from the river. WRT also undertook fisheries surveys at two other survey locations in 2013, but found no salmonids. The conclusion was therefore, with significantly improved water quality (validated through invertebrate surveys) the main priority is to remove obstacles to fish migration, allowing fish from the main river to access and re-populate the Polgooth.

Walkover survey data helped to identify a series of barriers throughout the system. The most significant barrier is found along the lower reaches. The last 35 meters of the river have been culverted and this long, dark tunnel, with a smooth, featureless flow, is uninviting for fish to swim through and therefore acts as a total blocker. The design of a culvert by-pass is currently being developed under the South Cornwall River Improvement Project (SCRIP), funded via the Catchment Restoration Fund (CRF). The WRT hopes to finalise the design, and undertake the work later this year.

## A new walkway on the Hampshire Avon showing the benefits of installed woody debris

Wildlife Trust, Natural England, Salisbury City Council and Salisbury & District Angling Club) in the Avon Valley Nature Reserve just to the north of Salisbury City Centre, on a project to enhance the ecological status of the river and the associated floodplain nature reserve.

The project is being delivered in three phases:

- Phase I: Completed Autumn 2013 - Restoration of 1600m of chalkstream to reintroduce geomorphological processes, re-grade the banks to re-connect the river with the flood plain and the installation of large woody debris to increase bio-diversity.
- Phase II: completed July 2014 - Replacement of 485m of recycled plastic board walk, providing disabled access and educational signposts in one of the few accessible reaches on the Hampshire Avon.
- Phase III: Starting September 2014 - Restoration of a reed bed (currently in unfavourable condition). The reed bed is to be reduced by approx 500mm to re-wet and improve conditions for a whole range of species, including Desmoulin's whorl snail. Removing 1500 cubic metres of soil from the floodplain provides natural flood attenuation benefit for Salisbury. Soil from the site, is to be spread on the adjacent arable field for agricultural benefit as the reed bed soil is rich in organic matter. By spreading the soil outside of the 1 in 100 year flood plain it has significantly reduced project costs (and its carbon footprint) compared with disposing in landfill.

*For more information on the Avon Valley Nature Reserve project, please contact Russell Spencer, Catchment Co-ordinator on Tel: 01258 483371, or*

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A further three barriers to migration have also been identified along the watercourse. One of these was another culvert further upstream. Following consultation with the landowners and Cornwall Council, permission was gained to remove it. It was removed, and the banks re-profiled and re-turfed, at reasonable cost and all in one day; a great result overall!

Below this site, there is a weir which serves a small leat that is still in use. As removal of the weir is not a viable option, a pre-barrage or tailwater back-up is proposed which will help to reduce the face height of the weir and increase the take-off depth for fish attempting to move upstream. This will be a low-tech and low cost solution, which should be effective in helping to improve passage for salmonids.

Reconnecting the Polgooth to the rest of the St. Austell River should have a significant impact on the ecology and fisheries of the area. Given the amount of clay and suspended solids in the main river, it is even more important that fish have access to spawning and juvenile habitat in smaller, cleaner tributaries.

#### *Fish tagging on the River Avon*

The River Avon in South Devon is an iconic Atlantic salmon and sea trout river, but faces problems from natural and manmade barriers to migration. In addition to this, close to its headwaters, is South West Water's (SWW) Avon dam reservoir. This is an impassable obstacle to fish migration and presents problems with downstream water flows and movement of bed load materials. Both of which are important for fish spawning and habitat.

We are working on the Avon, as well as the other rivers in South Devon, under the CRF funded South Hams River Improvement Project (SHRIMP), with the aim of tackling failures under the WFD. In the case of the Avon, these failures are predominately for fish. We have been working alongside SWW and the Environment Agency to undergo a series of "trial" water releases from the reservoir to aid fisheries conservation in the river. These are carefully planned to target the different needs of fish in the catchment with the aim of aiding both downstream and upstream migration, as well as moving introduced gravels throughout the system (another key piece of work WRT are leading on).

We are planning to tag salmon and sea trout to gain a better understanding of how an additional water release may help them on their migratory



**Removal of a culvert (a) on the Polgooth stream with bank re-grading and re-turfing (b)**

journeys throughout the catchment. The aim is to tag (using Passive Integrated Responder (PIT) tags) both young fish before they head downstream in the spring and adult fish looking to enter the river in the autumn. This information can then be analysed in light of environmental factors, such as flow rates, and in particular in relation to the trial water releases.

This study should allow us to demonstrate how the movement of fish up and down the river is related to additional water releases, thereby enabling future releases to be timed to achieve the greatest effect in terms of conserving fisheries. Additional flow is not only linked to the movement of fish throughout the river system but can also provide depth in key areas where the fish are vulnerable to predation. We look forward to reporting the findings on this work in the year to come.

*For more information on WRT, please contact,  
Web: [www.wrt.org.uk](http://www.wrt.org.uk), Email: [info@wrt.org.uk](mailto:info@wrt.org.uk) or  
Tel: 01579 372140*



## Bristol Avon Rivers Trust (BART)

### *Upper Avon Catchment Initiative*

Our work placement student, Maxine Goodey, has walked a good few miles within the catchment recording what she has seen as she goes. Maxine has made a lot of contacts and we are indebted to Leslie Bennett in particular, who has given hours of her time showing Maxine the intricacies of the river system around Malmesbury. Maxine will be producing an overview report when her placement finishes at the end of August. The report will be used both for wider engagement but also to identify where local projects can make a difference, particularly where volunteers can be involved.

We also had a good reception at the Wild Sherston event where our stand and talks have 'spawned' an evening discussion meeting led by Professor Mark Everard, talking about how local people might make improvements to their local river. This is being followed up by a river walk in August to further this.

### *Somerset Frome Catchment Initiative*

We have been fortunate to make 'friends' at the start of this initiative who we hope will help to spread the word over time leading to wider involvement. Our 'friends' so far include Friends of the Frome who have also agreed to be one of our 'Beacon' groups, FWAG SW, Somerset Wildlife Trust, and the Environment Agency and all the angling clubs on the Frome, led by Frome Angling Club (AC).

BART are very grateful to Ahern Technology who have donated several days to carry out a walkover survey for us, which has really helped progress this initiative, which is currently unfunded and entirely dependent on volunteer input. Ahern have carried out a walkover of the main river from Witham Priory to Rode. BART have completed this piece of work using the same methodology, by finishing the walkover from Rode to Freshford and producing a report.

BART are also thankful to the Environment Agency who have helped by providing information and helping familiarise us with the area – which saves days of exploration and getting lost.

Frome Angling Club and other local angling clubs are producing an 'Angling Plan' which will be shared with others, highlighting what they feel needs to be done to improve the river, what they can do themselves and where they may need help.

We hope to meet this Autumn to review the information we have collected and to discuss next steps.

In the meantime Friends of the Frome have been tackling the Himalayan Balsam which is rife along the river.

### *Wellow and Cam Initiative*

Our work on the Wellow & Cam has built on a foundation of information provided by the Environment Agency and has consisted so far of volunteer efforts on the Snails Brook and Kilmersden Stream. We have walked and mapped these areas and identified where we can make significant improvements through habitat and general in stream work. We hope to progress these during the remainder of this year and into next spring. Maxine and Vickie, two of our volunteers, have also carried out some river fly monitoring and found a wide variety of invertebrates which was topped off by filming a hatch of Mayfly earlier in the summer. Whilst carrying out their surveys a good number of bullhead were found.

Melissa Hoskings our catchment officer will be extending this initiative in the coming months as we will be working closely with the Wild Trout Trust (WTT) on a number of small projects in the area. One such project, which has taken considerable effort to date, is to help the Wellow Fly Fishers develop a stretch of their trout fishing by planning the removal of three boulder weirs and then improving the river by carrying out in stream work and coppicing banks to encourage more light to reach the stream. BART and the WTT have freely



**The results of invertebrate monitoring in the Wellow catchment - can you spot the bullhead?**

contributed their time to developing and obtaining consent for these plans and will be working closely together to help raise funds to ensure these works can be completed for the club concerned.

*For more information on BART, please contact,  
Web: [www.bristolavonrivertrust.org](http://www.bristolavonrivertrust.org), Email:  
[info@bristolavonrivertrust.org.uk](mailto:info@bristolavonrivertrust.org.uk) or contact Ian  
Mock on Tel: 07411 488084*

## **Calling all Rivers Trusts**

***If you represent a Rivers Trust in Wessex or Devon & Cornwall and want to contribute to these newsletters then please get in contact***

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