

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 the South West region

Improving fish passage

In Devon, the fish pass at Tipton St. John on the River Otter has now been completed. This site was previously discussed in our May edition of the newsletter and will allow upstream passage for fish, especially salmon.

Two weirs near Storridge, River Yealm in South Devon were dismantled and have been carefully rebuilt under the close supervision of Julian Payne, one of our geomorphologists. Structures known as 'check weirs' were included in the design and also some bank protection work was carried out to stop the river under-cutting during high flows. Using our 'in house' expertise we were able to complete this groundbreaking project at minimal cost. The clay company, Sibelco UK, donated nearly 200 tonnes of large boulders with an approximate cost of £8,000 to help the project. The 19 large lorry-loads of local stone came from less than two miles away. This helped keep transport costs down and reduce the carbon footprint of the scheme.



The new fish pass at Tipton St. John on the River Otter

Angling participation events

Our Devon and Cornwall teams have organised a small number of angling participation events and family fishing days throughout the summer holidays. In North Wessex we have provided fishing whips and funding towards angling coaches at a number of events including the Apex Lakes Angling Participation Day, Bathampton Family Fun Day, SOFA Day and the Bishops Fox Fishing Activity Day.



The rebuilt weir at Lower Storridge

Summer fish kills

The Grand Western Canal in Tiverton lost hundreds of roach and pike during the hot weather in July. The canal suffers from algae and weed growth during the summer and is particularly shallow in places. This resulted in low dissolved oxygen levels. Paul Gaaney, from the Environment Agency, said: *"The problem was caused by a natural algal bloom that grew towards the end of the recent spell of hot sunny weather. When the sunny spell ended and the weather turned cloudy, the algae stopped producing as much oxygen, but continued to deplete oxygen levels at night, leaving fish struggling to survive. Like all water plants, the algal bloom produces oxygen whilst photosynthesising during the day, and depletes oxygen levels in the water whilst respiring at night."* We lent Devon County Council (DCC) aeration equipment to prevent further losses. We are



Aeration equipment on Grand Western Canal

continuing to work with DCC to ensure they are prepared for any future events.

Over 1,600 fish were rescued in a three-day operation from the River Tarrant in Dorset. This river is a major tributary of the River Stour and an important nursery for brown trout, salmon and grayling. When Dorset gets a long period of hot, dry weather, the Tarrant, fed by underground springs, starts to dry up. This leaves large pools which trap the fish and which can also dry up later as the groundwater levels drop. This year saw nine species of fish rescued including brown trout, grayling, chub, dace, barbel, eel, bullhead, stone loach and minnow. There was greatest interest in the barbel (age 1+) as we have previously introduced barbel to support the Stour's dwindling barbel population. So, could this be the progeny?

For more information on the River Tarrant rescue, please contact Roger Genge, Fisheries & Biodiversity, on Tel: 01258 483403, or Email: roger.genge@environment-agency.gov.uk

We have responded to several fish kills and reports of fish in distress throughout rivers and stillwaters in Somerset and Wiltshire. All of the events related to hot temperatures and low flows in rivers. This led to reduced dissolved oxygen levels, below which fish could survive. We deployed our aeration equipment to several locations on the River Brue, Glastonbury, the River Sheppey and the Hixham Rhyne near Cheddar. This helped prevent further losses of fish.

Salmon in the Par River

The recent discovery of an eight pound hen salmon in the Par River in Cornwall was somewhat of a surprise as the river suffered a significant pollution incident in July, which killed fish over a seven kilometre stretch of river. We hope that the salmon, which was found freshly dead in the middle reaches of the river, is a sign the river is recovering after the pollution. We are still investigating the cause of the pollution, which killed over a thousand brown trout, sea trout, juvenile salmon, eels and flounder. The scale of the fish kill was a shock as the Par River is a relatively small river, never before noted or valued for its fishery. A member of the public reported the sighting of the hen salmon and we think it may have entered the river after the pollution when the river rose following localised rainfall.



A brown trout being returned to the River Tarrant following a fish rescue

KHV outbreak in Somerset

During September, we responded to reports from anglers of carp dying at a stillwater fishery in North Somerset. We worked with the Fish Health Inspectorate (FHI), Centre for the Environment, Fisheries and Aquaculture Science (Cefas) to get a sample of fish tested. The results showed that the carp had clinical infections of Koi Herpesvirus (KHV), which is a notifiable fish disease. The fishery has since been designated for the disease and strict biosecurity measures have been imposed by the FHI.

*Details of all sites designated for KHV and other notifiable fish diseases can be found at: <http://www.defra.gov.uk/aahm/disease/khv/>. To download our fact sheets on **KHV and Fishery***

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0845 988 1188

www.environment-agency.gov.uk

biosecurity please follow the links, or search for 'KHV' or 'Fishery biosecurity' on our website:

www.environment-agency.gov.uk

For more information on fish health, please contact your local fisheries officer or email our Fish Health Team at: fish.health@environment-agency.gov.uk



Fish recovered from an illegal net during one of our patrols

Operation Foreman in Poole

We have joined together with the Inshore Fisheries and Conservation Authority (IFCA), the Marine Management Organisation (MMO), Cefas, the Borough of Poole, Dorset Police and Poole Harbour Commissioners to target fisheries crime and share resources and manpower on intelligence led operations. Each organisation has a different piece of the puzzle and this group will aim to put them together. Recent fisheries patrols in Poole and Christchurch have given good results, with illegally caught fish and gill nets being seized. Our enforcement partnership in Christchurch with Sembcorp Bournemouth Water has led to us seizing 150 metres of gill net (containing 14 fish) that was set illegally inside Christchurch Harbour. These nets pose a very high risk to salmon, which are being targeted along with bass as they head towards the Rivers Avon and Stour.

Intelligence & fisheries enforcement

Using intelligence to guide our fisheries enforcement has been paying dividends for both us and partner organisations in several of our estuaries and key coastal areas. Our fisheries officers are now 'cross-warranted' with those from the Cornwall and the Devon & Severn IFCAs. This

broadens the powers they can exercise and increases their efficiency in dealing with fisheries crime. Our warrants deal mainly with offences against salmon and freshwater fish, whereas the IFCAs are empowered to protect sea fish. Illegally-set nets in estuaries and coastal areas may trap salmon, sea trout and marine fish.

Plymouth and Fowey Area

A number of reports of illegal netting in the Plymouth and Fowey area, led to some useful observations and allowed us to seize a fixed gill net, set between Donderry and Portwrinkle, using powers granted under IFCA warrants. Officers from the Cornwall IFCA have also seized a small fixed gill net set near Picklecombe Point before it caught more than one sea fish (no salmon or sea trout, thankfully).

Falmouth Area

On Thursday 4 July we worked with Cornwall IFCA to follow up intelligence reports about gill netting in the Penryn River. This allowed the organisations to follow up with enforcement action:

- We collected video evidence of suspected netting offences which is under review by senior Cornwall IFCA officers
- We observed a fishing vessel without navigation lights and have passed statements to the Maritime and Coastguard Agency
- We spotted a possible breach of engine size registration, which has been passed to the MMO for investigation
- We inspected two other recreational fishing boats and gave their skippers advice on current rod and line fishing regulations

Private Fisheries

We have also been working with the Police and private fishery owners over reports of fish theft from their waters by unlicensed fishermen. Investigations into reports of fishing without licences and theft of fish from South West Lakes Trust reservoirs across the Area are in progress.

Elver netsmen banned from fishing

Two Somerset men have been banned from elver fishing for a total of seven years after being caught using illegal nets on the River Parrett. Our bailiffs saw Kevin Simmons and Keith Clapp fishing for elvers at two separate locations on 4 April 2013. Licensed elver fishermen are restricted in the size of the dip nets they use. Each net can only be

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0845 988 1188

www.environment-agency.gov.uk

operated by hand and must not be left unattended. The rules are designed to protect elver numbers and ensure stocks are not over-exploited. Bailiffs noticed the defendants were using dip nets fitted with handles that were too long and that the nets had been left unattended. Both men were fined £300 and ordered to pay £400 costs by Bridgwater magistrates after pleading guilty to offences under the Salmon and Freshwater Fisheries Act 1975. Keith Clapp also received a four year ban, while Kevin Simmons was given a three year ban. The court ordered their elver fishing equipment be forfeited and destroyed. *'Illegal fishing damages eel stocks, harms the environment and is unfair to law-abiding fishermen. We won't hesitate to prosecute offenders'* said Richard Dearnley for the Environment Agency.

Prosecution success in Wessex

Our fisheries enforcement officers have recently notched up some prosecution successes that attracted widespread coverage in the angling press. The two latest cases were both the first of their kind and included a Bristol angler caught fishing during the closed season. Adam Power was ordered to pay £1,335 in fines and costs for flouting fisheries byelaws on the River Avon at Keynsham. It was the first time an angler had been caught committing the same offence on three separate dates. Bailiffs swung into action after receiving complaints from members of the public. The case was publicised by the Angling Trust that circulated it to its 35,000 members. It also went viral on the Fishing Magic website that has 80,000 members.

This prosecution followed another national 'first' last year when an angler, also caught fishing on the River Avon during the closed season, was prosecuted for trying to pervert the course of justice after he assumed a false identity. In the most recent case, a Bridgwater man became the first angler in the south west to receive a community service order after he was caught fishing without a rod licence at Bridgwater Docks. Scott Riddle began shouting and swearing after bailiffs asked to see his licence. He struggled violently and had to be handcuffed as bailiffs arrested him. Police were called to assist. Riddle was ordered to carry out 50 hours unpaid work and banned from fishing for a year by Taunton magistrates. He was also ordered to pay £100 costs. It was the more serious public order offence that attracted the community service order. Magistrates would not impose this penalty on an

angler only facing the lesser offence of fishing without a rod licence.

Bristol Avon fish surveys in the dark

A hi-tech cross-team effort has, for the first time, allowed us to use a hydro-acoustic device to survey a 20 kilometre section of the lower Bristol Avon for fish. This survey was carried out over three successive nights in August. This followed two days of reconnaissance and obstacle mapping. Night-surveys are necessary because fish behaviour and activity during the hours of darkness produce more accurate survey results. We gathered data on a laptop via the hydro-acoustic unit which was mounted underwater from the front of the boat. The information gathered will help to fill a large gap in our knowledge of the lower Avon fishery between Bath and Bristol. This work will form part of a wider review of 50 kilometres of this flagship recreational fishery and improve our understanding of the river in relation to Water Framework Directive (WFD) objectives. The complex logistical exercise was only possible thanks to the loan of kit and expertise from National colleagues, coupled with the hard work and enthusiasm of all those concerned. We are grateful to all those that also had a hand in making this happen, and also to the Canals & Rivers Trust and marina operators for their help and cooperation.

For more information on the Bristol Avon hydro-acoustic survey, please contact Jamie Rich, Analysis & Reporting on Tel: 01278 484565 or Email: jamie.rich@environment-agency.gov.uk



Preparing the hydro-acoustic unit for the survey of the Bristol Avon

Invasive non-native fish audit

In the South West, we are conducting an audit of all stillwater fisheries to check what fish species are kept and whether there are any invasive non-native species present. This will involve monitoring a small number of selected fisheries and writing to all fisheries in the region asking for confirmation of the fish species present. We will also be writing to fisheries with ILFA (Import of Live Fish Act) Licences to establish if they still have the species present in their fishery. We have already started planning the monitoring programme, and will be contacting remaining fisheries in the next few months.

River Tarrant restoration project

Our South Wessex team have improved a 0.5 kilometre stretch of the River Tarrant in less than four days, for under £10,000. The project is part of the Winterbournes Restoration Programme which is a WFD ambition-funded project. It aims to restore degraded sections of rare winterbourne chalkstreams that are failing under the WFD. The work included the introduction of woody debris flow deflectors, bank and bed re-profiling, creating meanders and tree planting. Advice on grazing and fencing also forms part of the project to ensure its long term sustainability. All of the materials used were sourced on site, including willow limbs which will hopefully grow and offer some shade for wildlife along the river corridor. The work should create a more diverse habitat than the formerly dredged over-wide, over-deep channel. This will allow in-stream species such as rare invertebrates and brown trout to flourish and adapt to climate change. We hope that post-works monitoring of in-stream species will demonstrate these benefits. Further rehabilitation projects are planned for the River Tarrant.

For more information on the River Tarrant projects please contact Sarah Guest, Fisheries & Biodiversity on Tel: 01258 483441 or Email: sarah.guest@environment-agency.gov.uk

Smallbrook rehabilitation

Following on from a significant incident near Pancrasweek in 2012, our Environment Officers have targeted the Smallbrook, a tributary of the upper Tamar that has been failing its WFD target. We identified that grassland compaction and soil erosion were having an adverse effect on the brook. It was also possible that this was

contributing to localised flooding below Pancrasweek, and organic pollution was affecting the water quality in the brook. Over the winter months we visited every dairy farm in the catchment, offering advice and guidance, and where necessary, enforcement, to secure improvements. This appears to have paid off, because during a recent fish survey we recorded bullheads, brook lamprey and juvenile trout in numbers not seen since 1996. This indicates a considerable improvement in water and habitat quality. It is still early days in the Smallbrook's rehabilitation, and we are planning more work for this autumn. But, the improving fish population is clearly a leap in the right direction.

Protecting fish from otter predation

In North Wessex, we have helped two stillwater fisheries near Bridgwater to install otter fencing. Both fisheries had documented evidence of otter predation on the fish stocks and needed help funding their projects. This funding was made available through a national project to help open membership stillwater fisheries install otter fencing to protect their fish stocks.

Himalayan balsam 'bashing'

Roger Genge from our South Wessex Fisheries & Biodiversity team worked with a small group of people from the Probation Service's Community Payback Scheme (CPS) on a project to clear Himalayan balsam. The work was focussed around a pond that is part of our environment improvement scheme at Gundry weir on the River Brit, Bridport. With help from the CPS team and their supervisor Graham Metcalfe, the group were able to get stuck in and clear most of the balsam.



Roger Genge and a member of the CPS team pulling out Himalayan balsam

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0845 988 1188

www.environment-agency.gov.uk

Roger Genge said *“Everyone’s a winner! The environment, the Environment Agency and the community in general. We’ve got improved biodiversity potential and most of the CPS guys took an interest in the work – although it was difficult to explain why we were destroying lovely looking plants and being stung repeatedly by stinging nettles that we were trying very hard not to harm. The community wins as well, with reduced strain on the prison service and we get our work done at less cost on one of its targets – reducing invasive species.”*

Our team in North Wessex helped the Friends of the River Frome by removing balsam from the riverbanks of the Somerset Frome upstream of Frome town. At one site, extra care was needed because there is a large area of Japanese knotweed growing in amongst the balsam. It was therefore very important that this area was cleared carefully so as to avoid spreading the knotweed further. Large areas of the catchment are affected by the presence of balsam and it is good to know that there are communities and angling clubs involved in trying to control it.

News from the Region's Rivers Trusts

Bristol Avon Rivers Trust (BART)

BART managed an Environment Agency team of volunteers who elected to escape their usual working environment to help carry out some river improvements on a stretch of the upper Bristol Avon above Kingsmead Mill. With superb support from the Wild Trout Trust, a very useful little project was completed. It is hoped that fry refuges along the gravel shallows and the wood riffles will help to improve the habitat for the wild brown trout and grayling populations in the area.

By-Brook project

The By Brook Project is progressing well and has to date engaged with 20 local landowners, four local angling clubs and ‘The Friends of the By-Brook’ Community Group. BART has organised a Riverfly training course for local people interested in the long-term monitoring of macro-invertebrates in the river. The training course was brilliantly delivered by Wiltshire Wildlife Trust and resulted in 12 volunteers becoming trained to take monthly records. We currently have two Riverfly monitors covering three monitoring sites on the By-Brook and this will increase to 10 monitors covering nine registered monitoring sites. We hope to run refresher events later in the year.



Two volunteers learning about Riverfly monitoring on the By Brook

Plans to start bankside fencing on three farms have been agreed for the end of October, with a further three farms planned for November and December. The fencing will restrict cattle access and reduce sedimentation and phosphate influx to the brook. A very long list of improvement opportunities has been identified and we will be working closely with the angling clubs, landowners and local people to implement these in the spring and summer next year after some preparation work this winter. This includes installing ‘soft’ revetments and flow deflectors and tree planting. Fish pass feasibility studies for eight weirs are nearing completion and will be ready for assessment by BART shortly. After discussion of options with landowners the next stage will be to complete detailed engineering drawings.

A crayfish survey will take place during October. A series of walkover surveys, trapping and monitoring sessions have been undertaken by the South West Crayfish Project to determine the extent of spread of the non-native signal crayfish and the areas where the native white clawed crayfish still persist and their numbers. We are looking forward to receiving the report as its recommendations will influence future stages of the project. The electric fishing survey also showed a good population of brown trout and bullheads and small numbers of brook lamprey.

For more information on BART, please contact, Web: www.bristolavonrivertrust.org, Email: info@bristolavonrivertrust.org.uk or contact Ian Mock on Tel: 07411 488084

For more information on these newsletters, please contact Jody Armitage, Environment Agency, Tel: 01278 484655, Email: jody.armitage@environment-agency.gov.uk

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0845 988 1188

www.environment-agency.gov.uk