

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

River Wey opened up for fish passage

The River Wey in Weymouth is now open for sea trout and salmon migration every day, for the first time in a century. Westham Bridge, built in the early 1900s, effectively blocks off the River Wey from Weymouth Harbour. All water leaving the river system has to pass through a series of penstocks and flood flap controlled culverts. Migration is now possible, because we have installed a retarder (simply a large spring) to hold the flood flap open. The retarder holds the flap open at 300mm for a short period either side of the rising and falling tides and closes when equilibrium water pressure is reached. This gives sea trout and salmon an opportunity to move in and out of the river. Roger Genge, fisheries catchment officer for the Wey, will be carrying out random visual checks at the bridge two hours before, or after high tide, to observe fish movement through the flap.

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

'Yeo' fish are using low cost baffles

Following the installation of low cost baffles and vertically mounted eel tiles on one of our gauging weirs on the Congresbury Yeo, we have successfully seen fish (including brown trout) migrating over the weir. The Congresbury Yeo is failing its Water Framework Directive (WFD) classification due to poor numbers of fish, in particular eels and trout. It is thought that barriers to fish migration may be driving this failure. The fish seem to be favouring the section of weir where the slots in the baffles are present, which is what we hoped would happen. We have been monitoring the pass using an underwater camera, but unfortunately we have not been able to identify all of the fish species as some are clearly camera



Baffles installed on the River Yealm to help fish migration

shy. Importantly, evidence from our spot flow gaugings show that the baffles do not appear to have a detrimental effect on the function of the weir as a flow measuring structure. This is important for protecting properties within the area from flood risk.

Baffles installed on River Yealm

Baffles were installed to aid fish migration on a structure on the River Yealm, Cornwall. The baffles were installed on a high flow arch under a bridge on the main river. This channel now provides passage for salmon and sea-trout, past a historic weir which had previously been thought to hold up fish. The baffles were needed as the channel was constructed of flat concrete with a few inches of water flowing very fast over it. The baffles are made using recycled plastic and were installed by our Field Services Team this autumn.

Salmon or sea trout?

The Wild Trout Trust is making good use of footage filmed at one of our fish counters on the Hampshire Avon. The footage has been enhanced to show the key identification features of a sea trout returning to spawn in the river. Our fish counter at Knapp Mill records all salmon and sea trout returning to spawn in the Hampshire Avon. Salmon are a designated feature of the Hampshire

Avon Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) and our fish counter data plays a vital role in monitoring the population of salmon in the Avon and determining the conservation limit of the river. The footage can be viewed from the Wild Trout Trust's website (www.wildtrout.org) or by following this [link](#).

River Lydden protected

The River Lydden in Dorset has been protected by the joint efforts from our Environment Management (EM) and Analysis and Reporting (A&R) teams in Blandford. The River Lydden and the nearby River Stour are valuable spawning grounds for coarse fish. Around 10 years ago, a farm discharge in this area killed over 30,000 fish. Following a recent operation to find and stop a farm pollution, we strategically placed seven remote monitors (known as sondes) in the river. The sondes alerted us to critical levels of ammonia in the river. Our EM team



Pre (a) and post (b) work at Julian's Bridge, showing one of the two new high flow channels and fry bay

investigated and were able to quickly find the source of the pollution, another farm, where we gathered evidence and stopped the discharge. The monitors then indicated falling dissolved oxygen levels, so we rapidly deployed aeration equipment, successfully returning the river to its normal quality. We are confident that this swift action prevented a major fish kill in the river.

New estuarine survey records more fish

Our Environment Monitoring teams in Devon and Cornwall have been trialling a new method for monitoring fish for the WFD estuary surveillance programme. Our teams have been experimenting with a newly designed 1.5m benthic fish trawl to develop a safe and efficient monitoring tool for fish. This autumn we've carried out trials on the Camel and Taw/Torridge estuaries and sharing this experience nationally. The trawls have been very successful, giving us a more accurate understanding of the range of fish species present in these estuaries. We've experimented with deployment method, trawl speed, operating depth and equipment set-up. These refinements have increased our catches, which have included species such as sand eel, dragonet, sea scorpion, butterfish, pogge, rockling, plaice, flounder, brill, weaver and several pipefish and goby species.

Habitat improvements to benefit fish

Bridge repairs boost fish populations

Work on Dorset Highways historic Julian's Bridge on the River Stour in Wimborne has benefited the local fish population. The bridge needed work to prevent it undermining. Our fisheries team stipulated there should be no habitat loss during the work and suggested various ways of creating new habitat. As a result, there are now fry bays for coarse fish and links to ditches adjacent to the bridge that fish can use during high flows. Juvenile coarse fish were immediately seen using the new refuge areas. Gravels were also re-profiled to create further spawning and parr habitat. The work should allow the river to maintain the features that have been created, by supporting natural processes, and decrease local flood risk and scour of the bridge. This is an excellent result for the river with no cost to us, apart from officer time through the flood defence consenting process.

For more information on the Julian's Bridge improvements, please contact Andy Martin,

*Fisheries & Biodiversity on Tel: 01258 483324, or
Email: andy.martin@environment-agency.gov.uk*

North Channel (Frome SSSI) restoration

Dragonflies and damselflies were seen within hours of our work to restore a pond on the Moreton Estate in Dorset. As part of the River Frome Rehabilitation Plan, we cleared trees from around Hurst Pond, with advice from Rachel Janes at Dorset Wildlife Trust. The brash was piled up within the woodland providing additional habitat and hibernacula. Within hours of the tree canopy being opened, dragonflies and damselflies were seen darting across the water surface - a good demonstration of what other environmental benefits could be achieved. Clearing the trees not only brought in more light to the pond but the limbs were used as part of the North Channel Enhancement Project 100 metres away as in-channel large woody debris, which is proven to be a key part of any river enhancement project.

During last year's floods a large old oak tree fell into the North Channel at Moreton causing bank erosion and flooding of local fields during high flows. Flood risk to property was not increased but the tree could be easily seen from an upstream road bridge resulting in concern amongst the local community. The tenant farmer was unable to remove the tree due to its size. However as part of the North Channel Enhancement Project working towards SSSI and WFD objectives, we were able to reduce the flood risk, whilst retaining large woody debris within the channel. This created bed scour, and riffle and pool habitat for fish. The tree limbs were used further downstream as additional woody debris creating more habitat features. This is another example of how delivering river restoration projects can provide extra benefits to the wider community and environment.

River Tarrant restoration update

Our Fisheries and Biodiversity Team in Blandford have been working closely with riparian owners along the River Tarrant over the last three years to find solutions to fish migration issues and poor in-channel habitat. We teamed up with the Stour and Avon Operations Delivery Team, external contractors and local landowners to deliver six huge improvements on the river funded through the WFD. As a result, four fish easements and one kilometre of river restoration work has opened up nine kilometres of the river for fish migration with combined habitat improvements for wildlife. We will be monitoring the success of the project closely over this winter, spring and into next summer. We

will also be organising an open day for residents along the valley in the spring of 2014 to explain more about the project and its benefits to wildlife and land use.

Work on the River Tarrant was previously reported in our July to September 2013 newsletter. But, if you would like more information, please contact Sarah Guest, Fisheries & Biodiversity on Tel: 01258 483441, or Email: sarah.guest@environment-agency.gov.uk



New pre-barrages at Manor Farm Weir, River Tarrant to help improve fish passage

Alien fish targeted by enforcement team

Two of our fisheries enforcement officers in the south west, are part of a 20-strong team which aims to eradicate the highly invasive non-native topmouth gudgeon from England by 2017. They recently took part in a major exercise in Hampshire where a large fishery had become infested with the alien fish. Native species were first removed from the ponds and quarantined in a separate pond. The affected ponds were then treated with the poison rotenone, a naturally occurring organic substance which breaks down when exposed to light, heat and oxygen. This kills the topmouth gudgeon, which are then removed and incinerated. New to the fight against topmouth gudgeon is a hovercraft which can apply rotenone in environments where there is thick mud. Topmouth gudgeon, which originate from Asia and have entered the country via the ornamental trade, have so far been eradicated from 13 sites in England and there are a further nine locations to treat, and 12 more to investigate, before Defra's 2017 deadline.

To download our fact sheet on **topmouth gudgeon** please follow the link, or search for 'topmouth gudgeon' or 'non-native fish' on our website: www.environment-agency.gov.uk

You Tube video lands poacher in court

Benjamin Cook thought he might be famous after he made a video showcasing his skills as a poacher. But his plan backfired after a clip of him catching sea trout on a Dorset river with an illegal net appeared on You Tube and was seen by a sharp-eyed fisheries officer who recognised Cook. The court heard that we had spent £25,000 in 2012 on improvements to help salmon and sea trout migrate up the River Sherford to their spawning grounds. The river flows into Poole Harbour where netting is strictly controlled to protect fish stocks. Appearing before Bournemouth magistrates on Monday 2 December, Benjamin Cook from Poole was fined £175 and ordered to pay £300 costs after pleading guilty to using an unlicensed net to catch salmon and sea trout on the River Sherford in contravention of the Salmon and Freshwater Fisheries Act 1975. This is the first time we have used evidence from social media to secure a conviction.

Fish rescue on the Dawlish Water

Our Devon fisheries team conducted a fish rescue in November on the Dawlish Water, prior to de-silting works through Dawlish town centre in partnership with Teignbridge District Council, Dawlish Town Council & Devon County Council. We removed and relocated 51 large and 74 smaller trout that were in excellent condition. There



Undertaking a fish rescue on the Dawlish Water prior to de-silting work

were also four small sea trout rescued, which was encouraging to see due to the number of barriers to migration on this watercourse and its relative urban setting. Good numbers of eels, brook lamprey, as well as some bullheads and minnows, were also rescued and relocated to a suitable site upstream.



Stocking chub and dace on the Sheppey

Stocking to help fisheries

Barbel given a new home in the Bristol Avon

We have tried to boost barbel stocks in the Bristol Avon catchment by stocking in the region of 4,500 juvenile barbel. The rivers stocked include the lower River Chew, lower Somerset Frome and the Bristol Avon near Claverton and Great Somerford. The locations stocked are within the current range of the barbel population in the Bristol Avon catchment and it is hoped that these fish will grow to be caught by anglers in future years - as long as they have been able to seek refuge from the recent floods.

Helping fisheries in Bristol & Somerset

We have helped restock rivers in Somerset that were affected by fish kills this summer either through warm weather conditions or pollution events. Some of these fish came from our Calverton Fish Farm near Nottingham. But, we would also like to thank Wessex Water who kindly donated in the region of 3,000 roach from Sutton Bingham Reservoir, to a number of the sites. We are very appreciative of this support from Wessex Water. The rivers that have received a boost of fish include the River Brue and Sheppey (which both received 750 roach, 1,250 chub and 2,500 dace), the River Parrett near South Petherton (2,100

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roach), the West Sedgemoor Main Drain (6,350 roach and 2,500 common bream) and the Blind Yeo (2,000 roach and 700 common bream).

In addition, we have also helped out a small number of stillwater fisheries in the area by donating coarse fish to help improve angling interest. These donations were provided to angling clubs that we were unable to help through partnership funding projects either for habitat improvements or predator protection.

For more information on fish stockings and future projects in Wessex (North), please contact Matt Pang (Somerset) or Jody Armitage (Bristol Avon & Little Avon), Fisheries & Biodiversity on Tel: 01278 484655, or Email: matthew.pang@environment-agency.gov.uk or jody.armitage@environment-agency.gov.uk

Highbench Spring Lake receives fish boost

During the storms last winter the popular day ticket lake which caters for all access angling and also a popular junior and family venue had a disaster where the bund on the lake breached during high flows and all of the fish were lost down the Darknoll Brook and eventually into the River Stour. With help from Calverton Fish Farm we helped to re-stock the lake following measures to re-build the lake bund. We introduced 3,000 of our native crucian carp, tench and bream into the lake which has never been stocked since the 1980's to give the lake a kick start back into life and allow people to fish the lake again. We are also looking to obtain some roach from our cropping ponds in the spring for the lake to re-open next year for angling. The venue is very popular with families and juniors so we will also be providing some equipment to the



Jim Allan and Mrs Love giving Highbench Spring Lake a new lease of life

owner with hopefully a few evening teaching sessions next year. Mrs Love the owner was delighted with our help and we are all looking forward to next year when the weather warms up.

For more information on the Highbench Spring Lake fish stocking, please contact Jim Allan, Fisheries Officer on Tel: 01258 483405, or Email: james.allan@environment-agency.gov.uk



Roger Genge stocking roach, bream and dace in Wessex

Nadder & Stour get a roach boost

The River Nadder in Tisbury received a stocking of 1,000 roach this December from our Calverton Fish Farm. Earlier in the year we had problems with one of our flood defence assets which meant that many of the fish upstream in Tisbury Angling Club's popular venue were lost downstream. To assess this we electric fished the river downstream and re-located some of the fish upstream, then topped up the small roach population through stocking. Chub and dace will also be re-stocked in 2014 back to the levels seen before the original population was lost downstream.

The Dorset Stour also received 1,000 roach into a section of river where recently, we have completed five years of habitat improvements, between Spetisbury and Sturminster Marshall. Initial survey results showed that juvenile roach were using fry bays created from the enhancement work, but only low numbers of them were present, even in flood conditions. The small top-up of roach is aimed to boost adult numbers which have been lacking in the last few years seen during electric fishing surveys and also from reports from local anglers. Angling clubs will be reporting catches to us with continued fisheries monitoring work.

For more information on the Wessex (South) fish stockings, please contact Roger Genge, Fisheries & Biodiversity on Tel: 01258 483403, or Email: roger.genge@environment-agency.gov.uk

Stocking fish in Devon

In November, we stocked 2,000 bream and 2,000 tench to the Grand Western Canal in Tiverton. These fish were stocked in response to a failure of the canal wall at the end of 2012 and the resulting fish losses. We also stocked 2,000 roach and 2,000 crucian carp to Harpers Lake, in Exeter. These fish were stocked to aid the development of this new facility that was constructed and managed in partnership with Exeter and District Angling Club.

Angling Association stockings in Devon

Angling Associations in Devon have also been helping to boost their salmonid stocks by operating targeted stocking programmes:

- The River Exe and Tributaries Association run a salmon stocking programme on the Exe and its tributaries.
- The Torridge Fisheries Association runs a scheme on the River Torridge rearing salmon.
- The Axe Vale Rivers Association runs both a salmon and a sea trout stocking scheme on the River Axe.

Angling clubs in Cornwall welcome new fish stocks

Thanks to our Calverton Fish Farm, five angling clubs have had a boost to their fisheries. Plymouth & District Freshwater Angling Club, Plymouth Command Angling Club, Roche Angling Club, Threemilestone Angling Club and Marazion Angling Club all benefitted from a selection of rudd, bream, tench and crucian carp. Calverton driver James Rabjohns did the lion's share of the work bringing them down from the fish farm and then met up with Robin Duffy, Environment Officer, who assisted with the deliveries to the sometimes rather remote fisheries. All the clubs were incredibly grateful for the fish and have commented on how healthy the fish looked.

Protecting our European eels update

Throughout the summer and autumn this year, we have been writing to the owners of structures and abstractions from watercourses, which could be damaging to eel populations, either by preventing upstream migration or resulting in entrainment. Following on from these initial discussions with the

owners (which includes ourselves), we have been visiting sites to discuss what options are available and the process required to make improvements. This will be an on-going process and we will be contacting the owners of less significant structures and abstractions in the coming year(s).

*Information on the **European eel** can be found by following the link, or search for 'European eel' on our website: www.environment-agency.gov.uk*



A fine view looking down at the Wellow Valley above Bath

News from the Rivers Trusts

Bristol Avon Rivers Trust (BART)

By-Brook project

BART has begun a water quality monitoring programme of sampling and analysis at a number of sites in the By Brook, which should help us pinpoint issues. We have been particularly keen to collect samples in wet conditions as this is often when issues manifest themselves most readily and we have been "blessed" with some particularly wet conditions recently. We are looking forward to seeing the results in due course. We also have a team of students from Bath Spa University who will be carrying out River Fly Monitoring on the Lidd Brook in addition to that already completed in the main brook. We hope to make this a feature for future years too. In the New Year we hope to run another training event for river fly monitors and a refresher event for those already trained. We have also held meetings that are ongoing with local angling clubs to identify areas for habitat improvements. We will be helping to get these all consented and planned before the spring, when we hope works will commence after the trout have finished spawning. Some improvements will depend on the outcome of the fish pass feasibility work, but there is still plenty of opportunity for

improvement, some of which will involve fencing to protect vulnerable bankside environments.

Wellow Brook and Cam Brook

BART has been carrying out preliminary walkovers and mapping stretches of the Wellow Brook and Cam Brook in preparation for a project which will start later in 2014. At this stage we are just collecting data to form an outline plan of needs and possibilities and meeting local people who have the knowledge and contacts we will need to get things done.

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

Calling all Rivers Trusts

If you represent a Rivers Trust in the South West and want to contribute to these newsletters then please contact Jody Armitage

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