



WILD TROUT TRUST

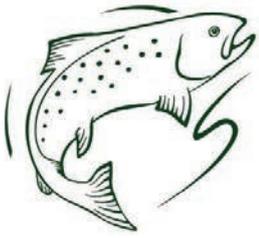
AUTUMN 2020 NEWSLETTER

WTT ANNUAL RAFFLE 17 DECEMBER

Fabulous prizes, see page 32
Do please buy a ticket or two



Sewage, slurry and abstraction • Pools for adult trout • Beavers
Trout travellers • PLUS Updates from the conservation team



WILD TROUT TRUST

wildtrout.org

You can help us
to help wild trout in one easy cast...
sign up a friend!

There are far more people who love wild trout and the rivers
in which they swim, than there are members of the Wild Trout Trust.

So be a trouty champion...
tell a fishing pal about the great work we do
(and about our social events, the journal,
the camaraderie of working on rivers)
and sign him or her up as a member.

It really does make a difference:
the more members we have,
the more work we can do
and the more our voice matters.

Challenge yourself to signing up
a new member via our shop at
www.wildtrout.org
or by asking Christina to
email or post a membership form
(office@wildtrout.org / 023 9257 0985).

Thank you.



Reflections on the water...

Shaun Leonard muses on WTT's past year or so

What we do is advise and give practical help to angling clubs, conservation groups, landowners and government bodies to improve habitat for wild trout and other wildlife. In our 2019/20 financial year, to the end of last April, we did 207 advisory site visits, not a bad effort to say our year was clipped by the first wave of Covid. Over 400km of river was walked by the conservation officers; in one case alone, in Cumbria, our man, Gareth Pedley, walked and assessed around 70km of stream! Much of what we did was in England, but we also did some great work in Ireland, covering 35km of one club's water and helping them make plans for habitat improvement, which they've started to implement. What we repeatedly saw and reported on was impact from man-made barriers, low flows, dredging and agriculture, including soil and nutrients hitting the river from runoff and livestock trampling of banks.

Our advice continues to be acted on; even allowing for very high water levels in the 19/20 winter and then Covid, 70% of recipients responding so far have enacted some or all the recommendations from the visit. So, for example, small weirs have been taken out, trees and boughs put in as habitat structures, fences put up to exclude livestock and fishery management improved, with less rigorous tree lopping and fewer fish stocked. In Hampshire, a WTT site visit and report initiated dramatic improvement to the habitat of 2km of the River Test in a project delivered by the Wessex Rivers Trust, EA and WTT, including removal of nine weirs and bed raising with lots of gravel. Extensive reaches of Yorkshire's River Ure and Wharfe have been fenced to exclude livestock, reducing soil input



Volunteers hard at work



and encouraging marginal plants and wildlife while in Devon, a plan with the Taw Fishing Club has seen considerable thinning of overshadowed river reaches and use of the arisings to create woody habitat features in the river. WTT advice has also involved development with landowners of sub-catchment-scale environmental plans, including with two large estates in Yorkshire and the creation of a farm cluster in Dorset, all aiming to improve agricultural practice and lessen impact on the land and streams.

Practically, we ran 51 projects, varying in scale from instructional days doing good things with volunteers through to river improvement with big machines. This work included improving habitat in a Kent river lacking water, introduction of gravel and trees to improve habitat in Cambridgeshire, floodplain reconnection in Sussex and the easing of fish migration in Surrey.

We also did plenty of spreading of conservation messages, speaking at 30 events to anglers,

conservation volunteers and student groups, putting articles in specialist printed press, local and national newspapers and TV and radio. The WTT website, blog and various social media platforms speak to an audience of thousands, updating on our projects with partners and the latest science interpreted for the layman. We finally printed our annual journal, *Salmo Trutta*, in September and, for the first time, also as an e-zine on our website. You'll see elsewhere in this newsletter that we did (and continue to do) a fair bit of direct representation to Governments and their agencies on what it is we see when our expert team is out and about.

When Covid hit, we simply couldn't get out to do what it is we do. As I write now, in October, we're all back and fiercely busy, with advisory work all over (though many planned visits in Ireland are impossible at the moment) and practical projects in various stages of preparation or delivery from Cumbria to Cornwall.

Parting shots... thank you to all of you who have supported WTT through the year, for example in spending so much in our annual auction. Our friends in the fisheries teams of the EA have been stalwart throughout. And thank you too to my colleagues and the WTT trustees for being absolute bricks when the yards were really hard.

IMAGES

Many of the images in this newsletter pre-date the Covid-19 pandemic. Since late March, we have applied appropriate Covid protocols to our field work, such as limited travel, small practical group sizes, social distancing, personal hygiene and kit disinfection.

Our offer to host 'virtual' angling club AGMs

With no apparent end to the restrictions on physical meetings, we expect that many angling clubs will be thinking about how best to handle their AGM this year.

We would like to offer angling clubs who are WTT members a hosted 'Zoom'* meeting for their AGM. This will include a presentation or Q&A session with one of our Conservation Officers for 20-30 minutes at the start of the meeting, following which you continue to use the Zoom facility for as long as you need to cover other agenda items. The WTT CO need not be present for the whole meeting.

Our Zoom account allows us to host meetings of any duration for up to 100 people. We can record the meeting and send you the file so that you can load it onto your website, Google drive or wherever you wish.

We will happily tailor the topic of our presentation to your interests, but here are some examples:

- The work of the WTT on managing and improving river habitat

- Trials and triumphs: the state of UK's rivers
- Fishing for wild trout
- Informal question and answer session on things fishy, rivery and/ or fishing
- A fun quiz for your members, again on things fishy, rivery and/ or fishing.

Contact Christina in the WTT office (office@wildtrout.org) if you would like to use this facility. We will need to schedule the date and time slot for the meeting and allocate one of the WTT team to be your presenter/ host.

Once the meeting is scheduled, we will give you details on how to access it via Zoom which you can pass to your members. Please give us as much notice as possible!

*WHAT IS ZOOM?

Zoom is a very widely used video conferencing facility (it can also be audio only) that is accessed by a PC/Mac, phone or tablet via the internet. Information such as photos, PowerPoint slides, spreadsheets and documents can be shared with the participants as well as discussions, as if you were in a room together.

New book by Nicolette Scourse

Wildlife Encounters - Southern Seas & Shores.

A zoologist's personal encounters with living diversity, journeying into animal lives on beaches, cliffs, desert and forest shores; in cold oceans, warm seas and tropical coral reefs; and in the skies above. Whilst the animals take the starring roles, human lives, past and present, intertwine with theirs as part of this living jigsaw. Available as both an e-book and printed copy, from Amazon and other booksellers.

Keeping in touch

Print and postage is expensive, so to keep costs down, we occasionally email members in between printed publications when we have important news or to let you know about an event. If you don't currently receive emails from us but would like to do so, please contact Christina via office@wildtrout.org. We also use our website, Facebook, Twitter and Instagram to share news and topics of interest. Members-only events are communicated via email, and in our printed publications if time allows.

Signal crayfish impacts on fish and invertebrates in upland streams

New research from multiple small upland streams has shown that non-native signal crayfish can have a negative impact on bottom living fish species and invertebrates, comparable to more lowland studies. For example, bullhead appear to have disappeared from two study streams invaded by signal crayfish. Invertebrate commu-

nities changed markedly in response to signal crayfish invasion, with sensitive, less-mobile invertebrates most affected. The impact upon trout is more complex. Salmonid fry (mostly trout in the study) were significantly less abundant in streams with signal crayfish, but larger trout were more abundant in crayfish-invaded streams. Importantly, this

is the first study to account and effectively control for changes in other parameters that might influence the results, like habitat degradation. It demonstrates that widespread and long-term ecological disruption is occurring in upland streams invaded by signal crayfish, but that the impacts may take many years to be fully expressed, reflecting the time it takes for crayfish to fully establish within streams.

Sewage, slurry and abstraction

Director Shaun Leonard on WTT's role in these hot topics

It won't have escaped many members' notice that rivers have had a lot of media coverage this year, particularly with regard to pollution from sewage and slurry and the impacts of climate change and abstraction in chalkstreams*.

You will also have noticed that there are many media and lobbying campaigns run by organisations and individuals, like the Rivers Trust and Feargal Sharkey.

Where is the WTT in this river-campaigning world? The short answer is that we do campaign for our rivers, but we usually do it directly to those responsible for making change (for example, in England, Defra and the Environment Agency (EA)) and by supporting grassroots community groups to fight for their river. We generally don't campaign in the media, which is very capably and expertly done by others.

Most of our resources are focused on providing practical advice and delivering habitat improvement projects and in that role, we put in around 1000 expert man days on the river each year, across much of the UK and Ireland, allowing us an extremely informed perspective on the state of many of our rivers.

We use that breadth of view in direct representation to Government and its agencies, unilaterally and with other NGOs, with an objective view based on what we see: many rivers wracked by lack of water, pollution, the dredging bucket and by agriculture. We meet senior managers in the regulatory organisations and provide solid evidence to the campaigning groups to support their work. I'd be wary of over-stating WTT's role, but I can say that we've been standing shoulder-to-shoulder with river



AIRES RIVERS TRUST

Shocking images from recent WTT reports: a Herts river without water, and Combined Sewage Outfalls on the River Aire in Yorkshire

fighters across the UK and Ireland from their very earliest days and do so still.

Our experience and observations also feed into WTT responses to many of the snowstorm of Government consultations on matters environmental, most recently EA's Challenges & Choices (www.wildtrout.org/news/our-response-to-the-environment-agencys-water-consultation). In all this correspondence, we repeatedly call for more effective regulation and enforcement of the water industry and agriculture, the two sectors recognised by Government as major impactors of our rivers.

One example of our direct campaigning is the case of the now infamous Axe Report, published in autumn 2019 by the EA, which told a tragic story of how that river had

been abandoned to intensified dairy farming and maize production for fodder and biofuel. Channelled through WTT, this report featured in subsequent articles in national newspapers and specialist angling magazines. One of our Conservation Officers returned to the Axe this summer and reported a river still in crisis. We've relayed these findings to Defra and EA. See our website for more detail.

You might not see our name in the papers but it is our low key approach that can make us effective 'behind the scenes'. You can be assured that we care passionately about our rivers and we take action to try to fix the problems that we find.

**For a roundup of all the various pollution campaigns, go to the WTT website blog www.wildtrout.org/wttblog*

WHAT DOES THE WILD TROUT TRUST DO?

We make rivers fit for trout. We...

- meet and talk to lots of people with responsibility for or interest in a river;
- walk their river with them, explain what we see, identify problems and how they can be tackled;
- follow up the walk with proposals for projects to improve the river;
- deliver habitat improvement projects, working with many partners;
- train people to carry out their own in-river projects by working alongside them;
- through a variety of media, offer practical and objective information, based on direct experience and the latest science;
- seek to influence national and local policy makers on the protection and improvement of rivers, lakes and their trout populations.



From Cheselbourne to Cheddar - with a TWIST!

Theo Pike, Trout in the Town's man in the South, reports on recent times

It's been a strange but busy year, here on the urban streams of the south of England. The end of 2109 saw a flurry of different activities: World Rivers Day with Andy Thomas at the CATCH River and Wildlife Fair in Wincanton; launching the Urban River Toolkit with Paul Gaskell at our Urban Conclave in Stalybridge, and meeting up with Denise Ashton to help judge the first Prix Charles Ritz in the UK (won by the Don Catchment Rivers Trust for their Living Heritage of the River Don

project - perhaps a sign of the times, and the innovative nature of contemporary urban river projects?).

November last year took me way down south into Dorset to visit a stream called the Cheselbourne, in a pretty little village of the same name. This is a tiny, intriguing chalkstream, one of the headwaters of the Piddle, that now seems to behave much more like a low-flow winterbourne as a result of abstraction. The walkover revealed that the Cheselbourne is also suffering from a complicated mixture

of urban and rural pressures, including road and agricultural runoff, armoured banks, undersized culverts, ornamental weirs, and imminent nearby housing developments. Thanks to very motivated local residents, some of these are already being seriously addressed with extra support from FWAG.

Early in the New Year, I spent some time with the rivers team at Wiltshire Wildlife Trust, plotting how to improve the River Biss in Trowbridge. Sadly, it's looking unlikely at present that we'll achieve our really big ambition to break the river out completely, and replace a huge and ugly car park with a beautiful wetland blue-green space right in front of the town hall. But there's still a chance that the EA can replace one of their gauging weirs with ultrasonic telemetry instead, making it possible to unlock a problematic impoundment in front of the Shires shopping centre, and soften those vertical red brick walls with boulders, gravel, and marginal planting. Watch this space!

As lockdown approached in March, I just managed a day walking around North Petherton, identifying fish passage issues and working out how the complicated splits of flow really function in this old milling town. Despite lots of concrete banks and more than a few fish passage barriers, there's plenty of good gravel and it would be quite a coup to bring wild trout back to the Petherton Stream sometime in the future.

And then it was straight into lockdown and furlough for most of us WTT staff...

When the national restrictions began to ease and we could start to think about getting out onto our rivers again, Jonny Muir asked me to join him for an interview on the Farlows Live platform on Facebook - talking about urban rivers, Trout in the Town, and especially how the South East Rivers Trust restored the Hackbridge

stretch of the Wandle. This is a project which successfully transformed a sluggish, silty over-widened reach into a sparkling, meandering chalkstream again (which is now a favourite spot with local urban trout anglers - in spite of big red buses rumbling past, it's hard to believe that you're still in south London, instead of somewhere much more expensive somewhere in Hants or Wilts!).

Meanwhile... if you attended the Urban Conclave and saw the launch of WTT's Trout in the Town Urban River Toolkit, you might remember that Paul and I also announced a new accreditation scheme for all our Trout in the Town chapters. Like so much else this year, this initiative has been held up by the Covid-19 pandemic, but we've now sent out accreditation forms to urban river projects all over the country.

Becoming an accredited chapter means that your group will be officially recognised as part of the Trout in the Town movement. When your accreditation is updated on the Trout in the Town page of WTT's website, you'll be able to see how you're progressing, compared to other similar chapters - and find out which other groups you could approach to share relevant experience and knowledge. And, of course, once we've heard what stage of development your group has reached, WTT may be able to offer you even more support to help you grow and develop further.

To help you celebrate all this, we'll send you a special Trout in the Town certificate - detailing First Contact, Bronze, Silver or Gold levels - and a matching badge to display on your website and other promotional materials. If you haven't received a form yet, but you'd like to get your group accredited as an official Trout in the Town chapter, please get in touch with me or Paul.

And finally - having been inspired by working with groups like CATCH



(Wincanton) and the Brue CREW (Bruton), and helped with some pilot funding from the EA and the Somerset Catchment Partnership, I'm now in the process of scoping out Trout in the Town-type opportunities in lots of other towns around Somerset too.

Historically, all the rivers which drain the hills in this area (especially around the Somerset Levels) have been exploited for their water - first by mills and later by the towns which grew up around them. These



developments have inevitably led to the usual problems you might expect with simplified urban river channels, including rushing rainwater off these upland areas faster than ever and making floods even more likely in the Levels.

Like all the best projects, this one comes with an acronym: Transforming Rivers In Somerset's Towns, otherwise known as TWIST. Over the next few months, I'll be starting this pilot with walkover surveys in towns like Cheddar, Wookey, Wells, Croscombe and Shepton Mallet - identifying challenges and opportunities for the future, and supporting wider catchment-scale projects like Hills to Levels. I'm also really hoping to make contact with local residents who might be interested in riverfly monitoring, pollution patrols and other hands-on projects to look after their rivers.

To find out more, please do contact me via tpike@wildtrout.org. And, hopefully, 2021 will be much less strange for all of us than 2020...

News from down South

Nick Lawrence, a WTT Conservation Officer in the South, whizzes through one of his projects, on a tributary of the River Test, carried out as this newsletter went to print!

My first day with WTT interestingly was the Glorious Twelfth, August 2019 and that day I met my colleague, Andy Thomas, on the Pillhill Brook in my home village of Abbots Ann in Hampshire; we were sizing up a piece of work for the Heritage Lottery-funded Watercress & Winterbournes Project (W&W), led by the Hants & IOW Wildlife Trust.

W&W is a five-year Landscape Partnership Scheme that brings together local communities and 16 organisations (including WTT) to restore and celebrate seven iconic chalkstreams: the Bourne Rivulet, Candover Brook, Cheriton Stream, Pillhill Brook, River Arle, Upper Anton, and Upper Test.

So, to be writing this today with the project just complete and a little over a year later is quite a moment. There has been a lot of water under the bridge (excuse the pun) personally and professionally. Covid-19 has changed our lives forever but luckily delivering projects in a Covid-secure way is not that difficult - working outside and with like-minded professionals and

volunteers socially distanced is possible. Personally, I am just glad to be back doing the job I love after 3 months of furlough and not a lot's changed job-wise: I still go and meet many clients to undertake advisory visits on their riverbanks and I still work from home as I always have. The WTT model works really well in our new, homeworking world.

Meanwhile, back at the Pillhill Brook. So, after my first-ever day with WTT, I designed a project that could be delivered under the banner of the W&W, its first practical project off the mark. This was all part of my learning curve as a Conservation Officer; coming from a practical background delivering projects was easy but designing and the maze of official permitting was... challenging. After wading through the paperwork and the various engagement processes, I finally had a project to deliver. Then, Covid hit, putting everything into a spin. The project was due to be larger but again due to Covid, some of the community engagement, using groups of volunteers in the river, was put on

hold; but, if there's the will locally, we'll try for this next autumn.

The main aim of the project this year refocused on creating deep-water refuges for adult trout, by dropping in wood and pool-and-run creation (also called 'dig-and-dump'). Five pool-and-run features will give big fish more varied habitat, and a bolthole in the low flow conditions we are seeing all too frequently. In addition to improving the in-river habitat, two new cattle drinking bays were constructed to water livestock away from and reduce mud run-off into this small, fragile brook.

All done now: the project lasted a week, completed in good time. We were ably assisted by the now go-to team of local, specialist contractors: my thanks to Rob Hilary, Oliver Shuldham and Max Hardman, helped by willing WTT members, Martin "Donny" Donovan and Rich Baker. Well done, lads.

W&W is at the start of a 5-year journey during which, hopefully, these small chalkstreams will get some of the care and attention they deserve.

**Left. Rob sculpting out the finishing touches on cattle drinking bays, connected to the river through a twin-walled pipe
Right. Oliver and Max hinging in some large woody material**





Above. One of the finished pool-and-runs, woody material and bed excavations helping to form the flume in the neck of the pool and gravel on the tail. Another lovely location under a hawthorn bush and undercut bank
Right. Andy Thomas supervising the first pool-and-run creation in a tight shady spot, the perfect location for a trout bolthole



News from the Midlands and Lincolnshire

Tim Jacklin, Wild Trout Trust Conservation Officer for the Midlands

Floods help salmon travel 160 miles up the River Dove

The floods of last winter seem a distant memory given subsequent events, but they had a significant impact on project delivery, not to mention the misery inflicted on homeowners directly affected. Not only were record highs reached (no less than six times on my local River Dove), but water levels remained elevated for weeks on end. One unexpected silver lining arising from this was the 'drowning out' of many weirs which are normally barriers to fish, right at the time trout and salmon were making their spawning migrations. This was brought home to me personally when a 6lb cock salmon took a fancy to my grayling nymph during a rare lull in levels on the River Dove in January. By river, this fish was about 160 miles from the sea, by far the furthest upstream-salmon recorded (to my knowledge) in the Trent catchment since efforts began to restore the species in the 1990s.

This fish had crossed at least nine weirs on the Trent and a further ten on the River Dove; of the latter, only the downstream four have fish passage improvements. Of course, the coincidence of 'freak' water levels and migration times cannot be relied upon to sustain migratory fish populations - access is needed whatever the flow. The presence or absence of salmon is an obvious indicator of this, but it plays out on lesser geographical scales for many species, with healthy wild trout and grayling populations reliant on well-connected habitats.

Obviously, being an out-of-season



capture, Tim immediately released this fish. There's extraordinary romance in this event - Tim has spent most of his 28-year professional fisheries life, with the EA and then WTT, sorting the free movement of fish in the Trent catchment. How fitting, then, that he should meet this salmon so far up river.

Weirs in Derbyshire - balancing fish passage and heritage interests

I have been working with the EA on a number of fish passage improvement projects on a range of rivers. The six unimproved weirs on the main stem of the Dove have been a focus of attention, with baseline information being collected on topography, water levels, flow modelling, ownership and heritage interest - essential information to assist in developing future projects. Unfortunately, the most advanced of these sites has stalled, as agreement cannot currently be reached with the weir owner.

On the Derbyshire Derwent, two exciting projects have been developed on the River Ecclesbourne: one to remove a weir and the other to restore the channel back to its former course, bypassing another weir. Together these will connect 20km of tributary habitat to the Derwent, opening the door to the 14 species of fish found downstream (including returning salmon) compared to the six found upstream. WTT has recently submitted a £200K bid to the Green Recovery Challenge Fund to deliver the weir removal in 2021, so fingers crossed!

On the main stem of the Derwent, above the Ecclesbourne confluence, we are involved in a project looking at the weirs at Milford. This is one of a number of sites along the river within the Derwent Valley Mills World Heritage Site, where water power was first successfully harnessed for textile production during the Industrial Revolution. Preserving and protecting the significant



Snake Lane weir on the River Ecclesbourne, built during a 1970s flood relief scheme. If you wanted to design the ultimate barrier to fish migration, this would come pretty close!

historical importance of the weir structures whilst improving fish passage presents a complex challenge but is also an opportunity to weave the natural history of the river into the narrative.

Bringing trout back to Welton in Lincolnshire

Between the floods and the lockdown, I managed to slot in a more straightforward project on the Welton Beck, a spring-fed stream running off limestone geology to the north-east of Lincoln. Although it has excellent, calcium-rich water quality, in common with most watercourses in the county, it has been heavily modified and maintained for land drainage and habitat is relatively poor. About a decade ago, the upper reaches of the Beck dried up during drought conditions and the fish, including trout, were lost. The event is still remembered by residents in the village of Welton and despite there

being trout frequently recorded during fishery surveys of the downstream Barlings Eau, they have not been found in the Welton Beck since the drought.

During a WTT walkover of the Beck in 2013, a poorly constructed culvert was observed close to the confluence with the Barlings Eau. The culvert pipe had been set too high and scouring flows had left it 'perched' above riverbed level,

forming a step and a barrier to fish migration. Could this be the reason trout had not recolonised the Beck? Over the following years, there were two unsuccessful attempts to address this problem. The first was the raising of the downstream bed level with gravels sourced from maintenance of a nearby

One of the three weirs at Milford on the Derbyshire Derwent





Before - getting the levels right, downstream of the perched culvert



Above. During - the first rock riffle being constructed

Below. After - three riffles and free passage through the culvert



EA flow-gauging station; unfortunately, these were quickly scoured away, taking us back to square one. Next, two notched log 'weirs' (so-called pre-barrages) were constructed downstream to raise water levels within the culvert, but these too were carried away by high water.

So, third time lucky, we embarked on doing a 'proper job'. Levels were taken, designs drawn, permits secured and quantities estimated. In early February, three stone 'riffles' were constructed in the 100m section of the Beck downstream of the culvert, raising the water level enough to allow fish passage and gently stepping-down the riverbed gradient. We will be keeping our eyes peeled for trout returning upstream.

Many thanks to project partners Blankney Estates and the Environment Agency.

Reconnecting rivers to floodplains in Lincolnshire

Elsewhere in Lincolnshire, we have been working on two floodplain reconnection projects, one on the Dunston Beck (a tributary of the lower Witham) and one on the upper Witham, near Grantham. Both have trout populations but poor instream habitat resulting from past channel straightening, bed lowering and dredging. The plans involve removing redundant floodbanks and lowering the valley floor alongside the river to re-create natural floodplain habitat. In addition to providing a more benign flow regime within the river, the schemes have benefits for riparian habitat and flood storage. So far, both projects have involved the 'hard yards' of topographical surveys, flow modelling, design, landowner liaison, archaeology and biodiversity surveys, consent applications and sourcing funding but with a fair wind the 'easy' bit with the big yellow machines should take place in 2021!

Nowhere for the grown-ups!

Andy Thomas, WTT Conservation Officer, explains why some sections of rivers lack trout holding pools and why this is not always a bad thing

On top of all the requests we receive for advisory visits, project proposals and practical visits, we also get lots of questions and general enquiries about all manner of trouty- and river-related topics.

I recently received an email from a very nice chap who had invested in a day's fishing on a beat of the upper Exe. My correspondent felt that the beat might have habitat issues that the fishery managers could address, in particular the lack of deep water suitable for holding adult trout: a reasonable view given that the reach was being sold to visiting rods as a viable day ticket fishery!

The topic of what might be an appropriate intervention to create optimum lies for adult trout, is one that pops up time and again during our travels undertaking advisory visits for landowners and fishing clubs. It is a moot point but it sometimes seems a little unfair if beat owner A has a reach that only supports long, shallow glides and riffle habitat that might be deemed 5-star spawning and juvenile habitat by us trout boffs if there is no bar (pool) for the adults to hang out!

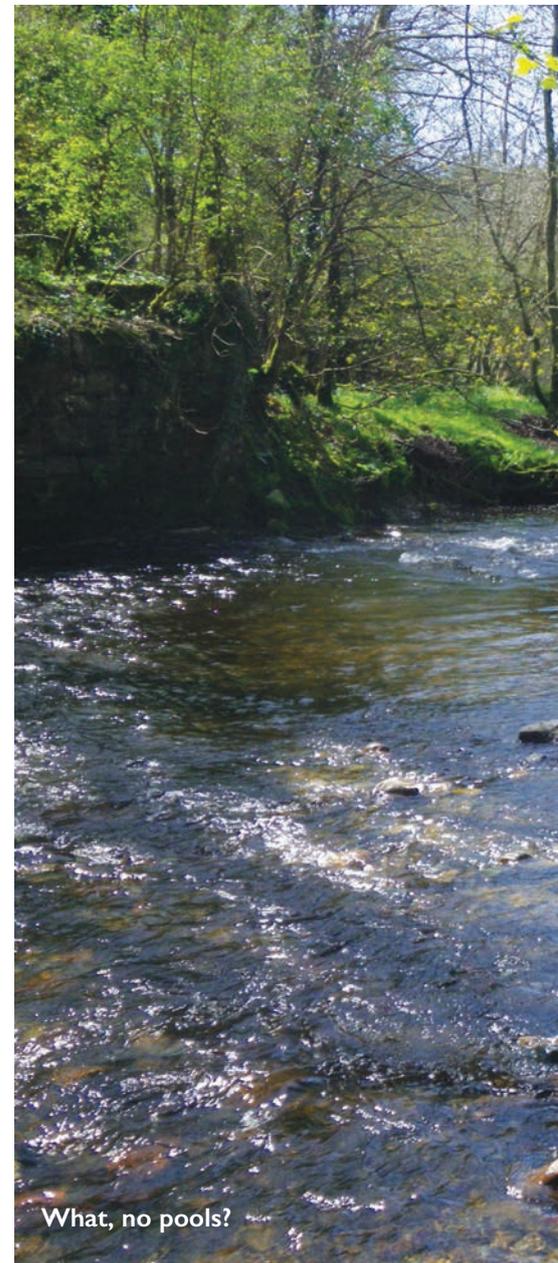
Owner B, who has the beat immediately downstream, may well benefit from that high quality upstream habitat as the growing trout redistribute seeking more suitable lies, particularly if that beat is blessed with deeper, well covered glides or complex holding pools. So, what do we make of situations like this?

As fishery managers and as potential ticket-buying rods, we

have to be aware that deeper pool habitats on some systems are naturally restricted by the local geology and it really isn't possible, or even appropriate, to create deep-water lies. If you can imagine a river valley consisting of comparatively thin, friable soils overlying mainly flat, impervious bedrock, then that river is likely to have long, wide, shallow sections with very few pools, even more so if the riverbanks are heavily grazed and lacking in significant tree cover. Plonk in a large piece of wood, or as Charles Rangeley-Wilson calls it, "confrontational" woody material, and there is a chance that some water will be partially backed up, potentially providing those much sought-after deeper holding areas.

Woody material placed in a channel formed on hard bedrock is not going to promote the naturally scoured pools that might otherwise develop in a river flowing over softer material such as (for example) chalk or limestone, which can and does erode. Fortunately, many of the rivers flowing over hard rock geology are blessed with natural breaks and lines of weakness where pools can develop. Even on rivers that are comparatively shallow, adult trout will hold and thrive provided there are complex flow patterns, proximity to cover such as tree roots and the all-important food conveyer belt.

In order to provide enhanced lies for adult trout, we can and do lower the riverbed, but only on rivers that



What, no pools?

flow over a geology that can naturally erode. Often the reason why deeper pools do not form naturally on some of these reaches, is because they are close to the top of the river system where significant flow power is rarely achieved, or where the gradient is minimal, or possibly impounded behind a weir. All these factors can rob the river of the flow power required to bite on a fallen tree trunk and blow out the riverbed to create a new pool.

On reaches like this, digging a pool on its own is unsustainable. Unless it is carefully designed to ensure that fast flows are generated via a constricted pool 'neck' that continue through the heart of the pool, it will



just fill up with silt and gravel, even more so following a drier than average season.

As anglers visiting an unfamiliar spate river, it shouldn't be a huge surprise if some beats are exceptionally shallow, especially if that visit coincides with a late summer holiday, when any lift of flow from shallow springs or valley mires and wetlands has long since dried up. On such systems, the fish can often cope better than the angler and this is where local adaptations within the fish population are very important, with fish locally migrating into known refuge areas during low flows. Making sure our river habitat is joined up and not fragmented with

Making sure our river habitat is joined up and not fragmented with difficult man-made structures ensures that fish quickly redistribute once nature turns the taps back on

difficult man-made structures ensures that fish quickly redistribute once nature turns the taps back on.

As anglers, our eyes are keenly tuned to what might be attractive holding water for a big fat trout, but we should never lose sight of how valuable long, shallow riffles and glides really are. These areas are the nurseries and the pantries for any healthy river ecosystem and we mustn't be fooled into thinking that a river that is lined with enticing

back-to-back pools is always going to outperform the river with only one shallow pool every half a mile or so.

Andy has been, and is still, busy on projects. A write-up of one of his recent projects on the River Rother at West Sussex is now on the WTT website: www.wildtrout.org/content/river-rother-project. He is currently working on a project on the Eridge Stream in Kent which will appear as a news item on our website and social media in due course.



Love 'em or loathe 'em, we now need to learn to live with beavers

Denise Ashton reflects on trout, rivers and beaver reintroduction to England

Following a five-year study on the River Otter, Defra has announced that beavers on the Otter are to remain living wild and be allowed to spread naturally. With a conservative estimate of at least 200 beavers already living wild in rivers in England, and at least nine licensed and enclosed groups, it seems that beavers are here to stay. The Wild Trout Trust now has to devise a policy that best lets us do our job and create river habitat where trout and other salmonids can survive and thrive.

The introduction of beavers in England, both legal and illegal, has

been greeted with delight in some quarters and concern in others. Beavers are described as 'ecosystem engineers' because of the way they change their habitat by building dams and tunnels, cutting down trees, creating wetlands and wet woodland habitat. Many of these activities are a net benefit to the environment - increasing biodiversity, 'slowing the flow', capturing sediment and improving water quality are just a few of the oft quoted benefits. Concern is expressed by some anglers, farmers and landowners who are likely to have issues with flooding, damage to crops and trees,

damage to banks where beavers burrow, barriers to fish migration from dam building and increased water temperatures in the ponds above beaver dams. The 'pro beaver' community argue that these issues can be managed with appropriate interventions, from dam notching and removal up to and including lethal control. This is what happens in Europe where beaver introductions started to take place over 50 years ago. A good summary of the experience of beaver introductions in Europe is that for 10 years no one notices them, for 10 years they cause problems and issues and after that, people learn to live with them.



DAVID WHITE

BEAVERS AND TROUT

Beavers and salmonids have evolved together. In some places, such as western Canada, their beaver species is seen as an important factor in helping increase populations of salmonids.

The science suggests that beavers are not wholly bad or wholly good for trout, their effect changing in space and time. So why are we concerned about the potential impact of beavers on trout?

Rivers and their catchments have changed out of all recognition since beavers became extinct in England. Almost all our rivers have been hugely modified by man: dredged, straightened, fragmented by mills, bankside trees removed, disconnected from floodplains by artificial bunds, abstracted and polluted. This means they don't function as they did in the year 1500. Most rivers are now constrained by infrastructure,

farmland and flood banks and don't have the space to respond naturally to beaver dam building or wetland creation, so the issues they create have to be managed. Experience elsewhere in Europe shows that is expensive.

The changes people have made to rivers have resulted in more fragile populations of trout and salmon. Half of the sea trout rivers and most of the salmon rivers in England are 'at risk'. In many rivers, salmonid populations may not be robust enough to withstand the additional pressure that beavers could represent.

Before beavers are introduced to a catchment, there needs to be careful assessment of the likely benefits and impacts with funded beaver plans, but most importantly, work is needed to make rivers fit for beavers (and trout) before they become widespread.

Prof Jonny Grey's review of the published research on beaver/trout interactions shows that beavers are not wholly bad or wholly good for trout. Over the past few months we have spoken to people with direct experience of beavers in Scotland, Switzerland, Canada and on the River Otter, read many articles and spoken to many people with diverse views. A common theme is that people divide into 'beaver believers' and 'sceptics' and that view frames their perception of the evidence. We have endeavoured to go back to the base data of some studies (we are lucky to have some expert scientists on our team) and check the published conclusions and summaries.

Make rivers fit for beavers - and trout!

We want to see rivers made fit for beavers before more are released into the wild.

For example, 10m wooded or

shrubby buffer zones on both banks of the river will provide food and habitat for beavers and allow the river to create natural bypass channels around dams which will limit the barriers to fish passage. Buffer zones also provide a host of other benefits: more wildlife habitat, carbon sequestration, shade to keep rivers cool, flood management and sediment capture. Anglers and other water users should value the space created between agriculture (for example) and the riverbank. Farmers and landowners could be paid to create such buffer zones under the Environmental Land Management Scheme (ELMS) which will come into effect in 2024, replacing the CAP subsidies.

The other key change to make rivers fit for beavers and trout is the removal of weirs and culverts so that fish passage is improved. Beavers will often build their dams against existing structures and

exacerbate fish passage issues as well as damaging infrastructure; for example, road culverts can be blocked by beaver dams, damaging and undermining roads or causing flooding. Making rivers fit for beavers will have huge benefits for trout, beavers and all wildlife. The public support for beavers is an opportunity that we want to take for the benefit of our beloved trout. We believe that we should invest now in our rivers to make them fit for beavers and reduce the costs of future management. This is why we have chosen to engage with the discussions about beaver introductions, to explain and educate about the potential impacts on trout and to gain widespread support for making rivers fit for beavers.

Of necessity, this is article is an overview; for more information, go to the beaver page in the 'Library' section of our website: <https://www.wildtrout.org/content/beavers>

News from the far north

Gareth Pedley, Wild Trout Trust Conservation Officer for the North

This is a great opportunity to remind myself and all of you what I've been up to, and to assure you that I don't spend all of my time staring at trout!

So, in addition to the day-to-day site visits, presentations and general advice, here's a few snippets from my year so far.

with several obstructions and serious water quality issues remaining, but also that the river does have areas with great potential (see photos). Such walkovers serve to highlight and target improvement efforts of the EA and local industry and provide a reminder that there is hope even in the worst areas of most

Based on experience elsewhere from friends of WTT within the EA, Rivers Trusts and other conservation organisations, we showed that similar weir removals have been undertaken for less than 25% of the consultant's estimated costs, so we hope that removal will now be the route taken.



High-quality habitat in the upper Team catchment



Foul water discharge to the middle R. Team

Helping the River Team recover from a troubled past

Early in the year, I undertook a suite of walkovers for the Environment Agency to assess areas on the River Team, an often overlooked and neglected tributary of the River Tyne, near Newcastle: you may know the Team as it flows through Beamish open-air museum in Co Durham. Historically blighted by poor water quality, primarily from mining and domestic waste, this poor river was incapable of supporting fish in most areas until several recent initiatives started to improve the situation.

However, the walkovers revealed that there is still a long way to go,

catchments. Funding has now also been confirmed to undertake further walkovers on the remaining areas of the catchment.

Weir removal options

As soon as lockdown restrictions permitted, I carried out two fish passage assessments and feasibility studies in the Midlands for the EA. Both had previously been assessed by commercial consultants but progress had stalled due to a lack of support for a preferred option. The first was a large, redundant gauging weir (already replaced by hydroacoustic gauging) that had been highlighted for removal, but other options were under consideration due to very high cost estimates.

The second weir simply cannot be removed due to navigation requirements, so the task was to take a fresh look at the site and at previous feasibility studies to suggest a preferred option. In this case, a suitable solution had been identified in the form of a large-scale rock ramp that could facilitate passage for a wide range of species in the broadest range of flows. Naturalistic rock ramps (or similar structures) are invariably the best solution where removal is not possible and are becoming increasingly popular in forward-thinking countries around Europe. It is to be hoped that our involvement in these projects will provide the support to reinvigorate major fish



Left. Channel excavation on Black Beck

Right. Improved track and hard-standing over one of the replaced culverts. This area was a quagmire and inputting significant volumes of fine sediment to the watercourse



Below. Part of the restored Black Beck section with ~50% of the flow migrated over. Late-season reseeding (well into September) paid dividends in helping to consolidate areas of bare earth



passage improvements on both the River Trent and lower River Derwent.

Repairing the Black Beck

One of my major pieces of work was a habitat improvement project with, and funded by, the EA on Black Beck which is a small tributary of the River Ehen in west Cumbria. WTT assessments back in 2018 and 2019 highlighted issues of diffuse pollution, barriers, and channel realignments on what should be a valuable spawning tributary. This catalysed a project to address the worst aspects, including replacement of two undersized pipe culverts with bigger, partially sunken pipes, installation of hard standing around two problem field gates,

and restoration of >250m of the watercourse to a more natural, sinuous channel.

Rather than a rapid, 100% switching of flow from the straightened channel to the restored reach, flow has been allowed to naturally break through a small gravel bund (retained at the upstream end of the restored reach) as the beck level rises following rain. This means that the flow gradually increases within the restored channel over time, ensuring a good dilution of any fine sediment at the downstream end where it reconnects to the existing stream. This method also ensures that de-watering of the abandoned, straightened course is gradual, allowing fish and invertebrates the

opportunity to disperse upstream and downstream (and into the restored reach). We had allowed for possible fish rescues and they will be undertaken if necessary, but it looks like they'll not be needed.

This largely experimental approach (in the UK) is already working well and certainly appears to be mitigating the unavoidable fine sediment inputs that occur as a new channel is reconnected, particularly at low flows. I'm regularly revisiting the site to monitor progress, making any adjustments as required. We've now put some woody material into the straightened channel to reduce its capacity and accelerate the flow migration over into the restored reach.

Trout travellers

WTT's Denise Ashton reflects...

Getting to know where the big trout lie in your local river is one of the joys of regularly walking or fishing the same water. A good fishing friend of mine usually has one or two in his sights ("I know where you live" is the muttered threat) and runs season-long campaigns to catch them. We tend to think that it is the same trout occupying that lie from year to year, and sometimes we have evidence from multiple captures and recognition of spots or scars that it is, indeed, the same fish. However, I also wonder if what we have tuned into is not so much that one big trout, but a place where a big trout will lie; perhaps the big old trout will be displaced by a younger, but equally big, specimen at some point? Pure speculation, though we do think this happens in the hierarchical lives of wild trout. One thing that we do know from research, however, is that some (maybe many) trout travel about more than many of us anglers might think.

People tend to use the term 'migration' (or 'migratory trout') when referring to sea trout, moving upstream to spawn as adults and downstream to the sea or estuary as smolts (tail first and in shoals, bizarrely) and post-spawning adults (kelts). But, all trout migrate at some point in their lives; the distance migrated may vary from a few metres to many kilometres, with fish moving to spawn, to find different territories as they grow, to take advantage of richer pickings if food at home is scarce and maybe even to escape a shrinking river. 'Resident' trout are resident in a river in much the same way as we are 'resident' in the UK & Ireland, rather than at a particular address.

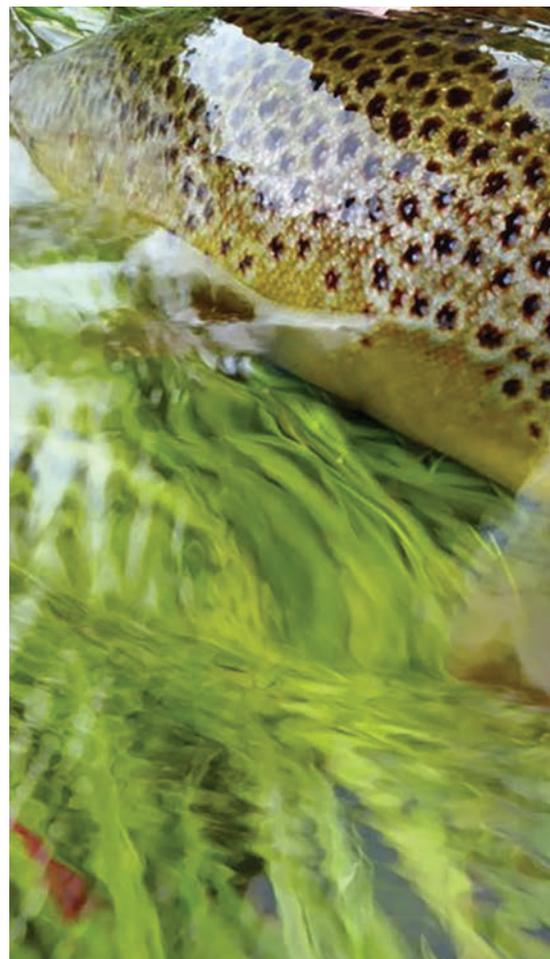
An 84km 'in-river' migration

The in-river migration that really brought this home (oops... unintended pun) to the WTT team was research on the River Deveron in Scotland in 2014. These fish have historically been thought of as sea trout; however, analysis of scales suggested that they are more likely to be fast growing brown trout, so a collaborative project using acoustic tags set out to track a bunch of fish. The results were incredible: the tagged trout migrated up and down the river over a much wider range than expected. One 55cm, wandering hen fish recorded a remarkable journey, migrating 84km from the Blackwater to Montcoffer, nearly at the mouth of the Deveron, within a month of being tagged. It is thought that this errant female migrated downstream (but not to sea) for richer feeding and then returned to spawn.

The importance of small tributaries

Tributaries as small as a metre wide are used for spawning and as nurseries for young trout. It is easy to ignore these tiny streams, but they are absolutely vital to a healthy trout population. On my local river, the Usk, research has shown that the majority of the trout in the tributary streams sampled were less than two years old and that 3 year old fish migrated to the main river in April and May - just as sea trout smolts migrate to sea at that time of year. The smaller the stream, the younger the trout, so it appears that trout gradually move downstream as they age and grow (see *Small Streams Are Beautiful* by Guy Mawle, *Salmo Trutta*, volume 16, 2013).

These small tributaries are vulnerable to drought and to hot summers which can cause water temperatures to become uncomfortable for the young fish. Shade from trees and overhanging vegetation is even more vital to small streams with limited or no deep pools than it is to main rivers, where deep pools provide a cool-water refuge.



Lake 'resident' trout

It is generally thought that adult trout in lakes migrate to spawn in either inlet or outlet streams. This choice of different spawning habitats can lead to differentiation between strains or even species of trout, the most famous example of which is the sonaghan and gillaroo trout of Lough Melvin which are distinct in their feeding habits and appearance and also their spawning locations. Gillaroo spawn in the outflow streams, sonaghan in the inflowing streams. Streams are

the spawning and nursery habitat for many lakes, with adults living in the lake. The adults may be very small if the lake is poor in nutrients, but if they have lost their parr marks (blueish 'thumbprints' on the flanks) then they are adults.

However, trout in lakes might also spawn in the lake margins, using whatever there is on the lake bed to incubate their eggs. Our President,

and South America. Other trout benefit from shorter distance assisted migrations. There is a tradition in one Scottish fishing hotel of anglers occasionally taking a bucket in the boat, not to bail out the water but so that they may 'assist' the transfer of trout from one loch to an apparently trout-free loch. As many anglers come back year after year, they can visit their newly populated

Recently, research has shown that the eggs of some fish species can survive through the digestive tract of birds, emerge in bird droppings and successfully hatch, albeit in very low numbers; sadly in one way, the research was not in the UK and not about trout, so we will continue to speculate how trout appear in unusual places.

Unimpeded migration is critical!

Migration is critical to all trout, but actually all fish (and many invertebrates) migrate, more or less. That's why, then, many river conservation organisations, like WTT, spend a lot of time trying to improve 'connectivity' in rivers by removing man-made barriers such as weirs and culverts. Even where these barriers are seemingly passable, they can slow down migration and make trout (and many other species) vulnerable to predators, including fish eating birds and anglers, as they hesitate and hold in pools above and below barriers. In one study on the Tweed a decade ago, over 80% of a batch of tagged, downstream-migrating sea trout smolts vanished at one weir! Recent and ongoing work there and elsewhere in Scotland is suggesting that around half of salmon smolts are lost during their freshwater migration, often disappearing above weirs.

It is believed that predation, especially by fish-eating birds, is a big part of the problem. There are, of course, natural barriers such as waterfalls and beaver dams, but man has increased the numbers of barriers enormously to the point where trout populations, which have evolved on the basis of largely free migration, are struggling.

A full understanding of just how vital migration is to all trout is incredibly important if we are to assess trout habitat, what might be impacting it and how we can improve it. Now, where do we keep the Semtex?



PAUL PROCTOR

Jon Beer, recorded a video for us in which he talks so interestingly about lake trout spawning - see the WTT You Tube channel (<https://www.youtube.com/user/WildTroutTrust>); he will also write an article for us on this topic in *Salmo Trutta* 2021.

Assisted migration

Some trout 'benefit' from 'assisted migration' from man, at a variety of scales. In Victorian times, trout eggs were transported all over the world, enabling trout to colonise entirely new territories such as New Zealand

loch and see how the migrants are enjoying (or not) their new environment.

How did trout get to remote mountain lakes with no apparent inlet or outlet stream, just a boggy margin? A man with a bucket is often the answer, and if there is a history of mining or other human activity, those fish might have been stocked for food in the distant past. Speculation that trout eggs or fry may be arriving on the feet of birds such as herons is one theory or perhaps vomited by fish eating birds travelling between lakes.



An alder felled and wedged between two living trunks, rather than cabled, to prevent repositioning. R Washburn

News from Yorkshire

Jonathan Grey, Research & Conservation Officer North

'Proper wood' in the Washburn Stream and the Upper Aire

As I typed this article, the tail end of Storm Alex was just flushing through the local becks and rivers, and that water was encountering a plethora of new 'challenges' placed before it. Several larger projects have kept me busy in the post-furlough period until the trout spawning window and end of in-river work (which for me is at the beginning of October), and they have mostly involved putting wood in the river. Proper wood.

I say that because, in the Yorkshire Dales, it's not that easy to find decent-sized wood to drop into rivers to make a big difference, but I've managed it finally. The first opportunity came about on the River Washburn, a Wharfe tributary. Yorkshire Water brought me in to advise on some habitat restoration options on a formerly straightened reach of the Washburn, upstream of Lindley Wood reservoir near Otley.

Historic coppicing of alder along the boulder revetment banks meant there were plenty of multi-stemmed trees where I could sacrifice one or two trunks and not detract from the equally important aspect of riparian shade. Perfect. Coppiced alder bounces back with fantastic low, reinvigorated growth, plus nodules on alder roots harbour atmospheric nitrogen-fixing bacteria that help to make the leaf litter from alder some of the most palatable to macroinvertebrates. My proposal involved installing 15 'tree-kickers' - hinging or completely felling suitably large trunks and full crowns to fall into the channel (also known as 'chop'n'drop').

In some instances, we winched the trunks back to lie parallel to the bank (within the river) and in others, the trunk remained at bank height while the crown rested in the water, simulating natural wood fall that unfortunately has been 'tidied up' for decades. All that structure in the



channel will, amongst other benefits, help to retain leaf litter, force the water down and/or around thereby diversifying river depth profiles and provide refuges from spate flow and predators. Another key aspect of the proposal was the relatively high density of kickers, to repeatedly interrupt the flow and make the water work to get past structure after structure in quick succession, which should create lots of substrate and depth diversity.

I've been undertaking similar work, albeit at diminishing scale, on two



A coppiced alder on Otterburn Beck, R Aire, laid into the channel to divert the flow and promote the deposition of a point bar downstream

WHY DO WE PUT TREES IN RIVERS?

Trees and branches in the river channel are vital habitat because they:

- Help the river to scour its bed, which creates pools and releases fresh gravel for spawning;
- Provide a bolthole for trout to escape from predators;
- Can be used deflect flow and protect banks from erosion;
- Supply food for detritus-eating invertebrates such as caddis and gammarus;
- Trap sediment, which helps keeps gravel clean and provides habitat for burrowing invertebrates such as mayfly;

Woody material in rivers is often removed because it is thought to be a flood risk and so that it looks 'tidy'. We assess the flood risk and secure material if necessary, and 'messy' is really good for trout!

smaller becks as part of WTT's contribution to the Upper Aire Land Management Project. My involvement is to kick-start in-channel restoration and reinvigorate natural processes in areas that other partners (the EA and Yorkshire Wildlife Trust) have already tried to reduce diffuse agricultural pollution by excluding livestock and creating buffer strips. The trees I can work with on some of these plots are only 8 years old but can still be put to good effect in a channel relatively devoid of character.

Monitoring trout populations before and after our habitat projects

I've started a Yorkshire Water-funded project, TROUT (Tackling Resilience On Under-performing Tributaries), to work with volunteers to improve habitat on nine Yorkshire becks. We've been extremely busy in the pre-works monitoring phase, establishing baselines of fish populations prior to any work commencing. Many members will be aware of some of the project monitoring that I have in place; it

has been exciting and disappointing in perhaps equal measures to survey more becks and gain a better understanding of trout populations on my patch.

OK, some have been desperately disappointing! Consider a particular reach of a crystal-clear, cool, spring-fed beck flowing from limestone that I found to have lower trout biomass and poorer population structure (in terms of age cohorts) than the Bradford Beck next to Shipley station which had its fish population virtually eradicated by

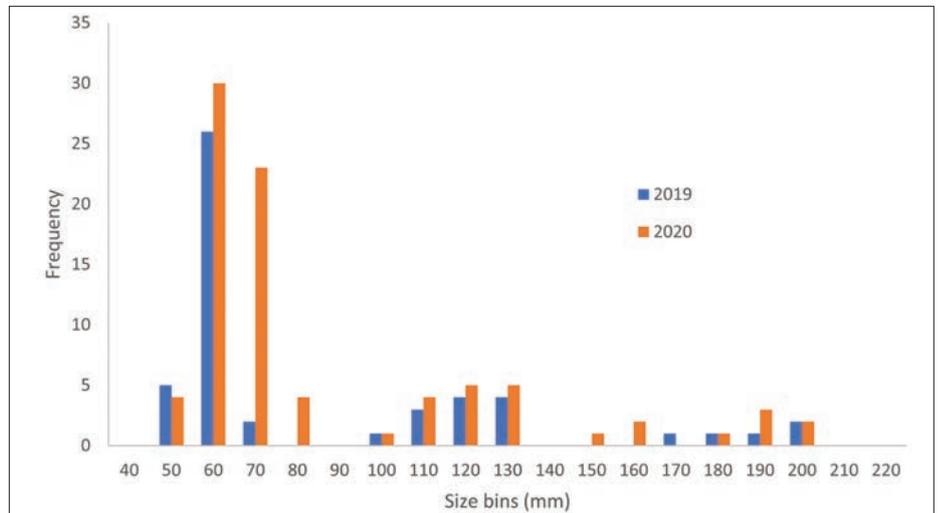


Sparkly gravel, still retained in Dauber Gill, and clearly used to good effect by the locals...

an acute pollution event (on top of chronic pollutants) 18 months ago! Bradford Beck has already had a helping hand. Together with the EA, Bradford Council and Friends of Bradford Becks, I designed and installed fish passage easements on several weirs that appear to have boosted recovery. The historical straightening and ensuing bank baldness from huge herds of ‘wooldebeest’ (or sheep, as they are generally known) on the poor limestone beck are to be tackled as part of TROUT this winter and spring of 2021.

To counter the above and demonstrate what can be achieved on these underperforming becks, an exciting result has emerged from the gravel addition trial on Dauber Gill with Nidderdale Angling Club (outlined in the Newsletter this time last year). To recap briefly, we installed woody deflectors to retain and sort 25 tonnes of gravel that was also added as part of an EA Fishery Improvement Programme grant.

To put the following results into a broader context, Pateley Bridge, just



downstream on the Nidd, recorded its highest-ever gauge levels in February for three weekends on the trot. Even I had some nagging doubts as to whether we would actually see any of the materials we put in the beck, ever again, let alone any positive results from our work. However, when we came to electric-fish the beck, we were delighted to find almost double the number of fat, young-of-year trout; this in a year when almost every other survey site with a decent time-series of data revealed negligible population change between 2019 and 2020. Of course, we lost some gravel downstream. Indeed, I guesstimate we lost 70%, but we clearly retained

Numbers of brown trout of different sizes caught by electrofishing in Dauber Gill, Nidderdale, pre (2019) and post (2020) addition of spawning gravel

sufficient in key areas to boost production. Even if we lost gravel from the beck, it was probably adding benefit in the main river which has been starved of gravel for the past 100 years due to the construction of Gouthwaite Reservoir. For good measure, we’ve topped up with another 25 tonnes! This site has been taken up within TROUT and hence I can continue to monitor developments for at least the next 5 years; I’ll keep you posted.

News from the East of England

Rob Mungovan, Wild Trout Trust Conservation Officer for the East

Nothing has been quite normal this spring and summer. I was lucky as I had work that I could do, but even making plans for relatively low-budget projects still felt as if everything could fall apart at very short notice; for anyone still worried or battling to keep work, you have my sympathy.

Gravel in the River Mel

I came out of furlough at the start of June and was able to jump straight into the River Mel. I've worked alongside the River Mel Restoration Group for many years, providing support for improvement of this little Cambridgeshire chalkstream. The latest phase of work, supported by The Technology Partnership (TTP PLC), was supposed to involve volunteers working with me to place 80 tonnes of mixed-grade gravel and chalk into the river. However, COVID-19 necessitated a rethink. To

avoid the issues of volunteers trying to maintain social distancing while working in tight confinement in the river, I used my local contacts to pull together a small delivery team involving a grab lorry, an excavator, and a single labourer. The result was a chalkstream brought back out of the silt, with new gravel that will hugely increase the spawning opportunities for the river's struggling trout population. This part of the Mel alongside Melbourn's playing fields is something to be proud of once again and has fired me up to continue the process along the rest of the playing fields so that children (and trout!) can enjoy a clean stream once again.

Aiding recovery from pollution on the Great Ouse

My next project was to return to the Great Ouse near Buckingham to complete work that had been

flooded off and then postponed due to COVID-19. Once materials and a team had been pulled together, doing the work over 3 days was the easier part, installing 70m of faggot ledges to retain spoil resulting from a bank re-grade. This latest phase of work on the Great Ouse is part of the EA's larger scheme to deliver habitat restoration to aid the river's recovery following two devastating pollution events. Many species of fish were lost but those remaining in the tributary streams, including brown trout, should establish new populations in the main river over the coming years. The spawning riffles installed last September have remained in place even after months of high water, which just goes to show that if you work with a river and put the right features in the right place, it will accept them. Put them in the wrong place and it will push them aside.



The River Mel, shaded and degraded



The River Mel, looking like a chalkstream once again

WHY DO WE PUT GRAVEL INTO CHALKSTREAMS?

- Silt-free gravel beds are vital for trout to spawn and are home to invertebrates, but river gravels are a valuable material and many rivers have been dredged to remove gravel;
- Rivers will naturally erode their banks and this releases new gravel into the riverbed, but where rivers have been straightened, impounded and abstracted the natural gravel replenishment process doesn't happen - so we put in, or put back the gravel.

The Great Ouse wiring team - many hands make light work



Habitat improvement for the River Welland

Through the heat of summer, I was fortunate to have my feet cooled in the waters of the upper Welland near Market Harborough, working with the Welland Valley Trust to deliver habitat improvements which saw the creation of a new wetland, bank re-grading, gravel placement, habitat ledges and tree-hinging; and, importantly, new fencing to ensure that the work was protected from cattle. As new plants establish, not only will the margins provide cover for juvenile fish, it is hoped that the water vole population will expand. Before the work, the river lay hidden in a deeply incised channel. Now that it has been re-graded and the top-of-bank widened, the river feels so much more approachable and it can hold a greater volume of water too. The main thing that I have learnt from offering support to another person's project is to ask, "have you checked that posts can be driven into the bed?" This reach of river had an extremely hard layer of cobbles beneath it and every post had to



be chiselled into position using a metal spike and various weights of sledgehammer. Tiring work, but we got there.

The forgotten tributaries of Cambridgeshire chalkstreams

Following on from the 2019 drought

Cooling off in the Upper Welland

in Cambridgeshire, WTT has become a project partner with Cambridge City Council, Cambridge Water Company and the local Wildlife Trust to undertake an audit of the area's local chalkstreams with



Chris French (Welland Valley Trust) supervising the placement of spoil to create new marginal habitat following tree-hinging to let in light

Training new volunteers for the River Lark; respect to those who have to wear PPE all day

precious chalkstreams, including the formation of an All-Party Parliamentary Group of MPs.

Practical training for the Suffolk Lark Catchment Partnership

And just before the country was facing its second wave of COVID-19 lockdowns, I'd agreed to lead some river restoration training with the River Lark Catchment Partnership. Numbers of participants were kept low, and a large-screen TV was erected in an outside shelter so I could run my Powerpoint talks. Practical sessions on wiring-down faggot bundles were held on dry land, which actually made demonstrating easier. The day went surprisingly well once my glasses stopped steaming up!



a focus on the small tributaries. We'll highlight to local decision-makers the stresses faced by the streams and actions that could be taken to improve their biodiversity. Funding is being sought for further work on the River Mel and to improve the Vicar's Brook in the centre of

Cambridge. Sadly, low flows and impending drought are still a hot topic in this area. The River Cam has been notably low again with river flow for September at only 47% of its long-term average. I'm encouraged that a genuine urgency seems to have entered the debate about our



News from Trout in the Town in the north

By Paul Gaskell TiTT Programme Manager

Well, it is fair to say that 2020 has been a strange old year. Trout in the Town, naturally, has not escaped the disruptive forces acting on society from last March onwards. That's not to say that there has been nothing going on - whether through partners delivering projects or the WTT finding new ways to work in response to COVID restrictions.

If you didn't have chance to attend the Virtual Annual Get-Together, you might not have seen the short on-stream film (including the fish above) and detailed video discussion of Trout in the Town project activities and successes. You can catch up on that whole film at your leisure on WTT's YouTube channel using this link: <https://youtu.be/HI-2oX0305lk>

Similarly, wherever possible, I've extended the use of video and remote conferencing technology to support meetings, presentations and

strategic discussions - including these examples from a recent meeting of the Douglas Catchment Partnership, Fisheries Subgroup.

The national restrictions on travel, social contact and other parts of normal life may prove to have created an opportunity for the WTT. In particular, by normalising the use of video conferencing technology, a reduction in CO₂ emissions has been achieved compared to travel that would, ordinarily, be necessary for me to attend various meetings. Less obviously, those meeting formats may also enable less extrovert participants to regain a larger proportion of input compared to 'in person' meetings which may become dominated by one or two more extrovert attendees.

The meeting above is just one example of the projects that are signing up to become accredited, local 'chapters' of Trout in the Town. This is an initiative coming directly

out of the *Urban River Toolkit* which we published in September last year. It is proving to be a very popular way of supporting (and charting progress of) groups looking after their own sections of urban river.

Other projects that have received Trout in the Town input that have been able to continue through delivery partners include the SUNRISE project in Stoke-on-Trent. A separate part of that project (the re-naturalisation of a concrete channel at Stoke City's old Victoria Football Ground site) was featured in some detail on BBC One's *Countryfile* recently - with the WTT being named as partners in the wider project. I'll be going out on site soon to see progress on the Staffordshire University site of this project. I'll also be able to add to my existing video record of how the site will change as a result of the works.

I'll be re-establishing activities with a whole variety of urban and suburban projects across northern England in the coming months and I look forward to reporting on progress on those. I also look forward soon to completing and publishing our *Mayfly in the Classroom* teaching resource as a 'print on demand' booklet.

Early September 2020 marked the 20TH anniversary of Christina Bryant running the WTT office; we asked some of WTT's founding fathers and grantees to reflect on her time.

Charles Rangeley-Wilson notes that "it was obviously a serendipitous move when I asked Jonathan Young at *The Field* if he'd recommend Chrissy for some "light extra admin work" and he said to me that she was "the best point and shoot fixer" he'd ever worked with. That was a pretty fair summation and I'm very glad we acted on it."

Mike Weaver remembers "Chrissy joining us only two years after we got started. She has certainly done a terrific job for us over the last 20 years and I would like to add my thanks to her for a contribution that has meant so much to the success of the WTT."

Jon Beer, WTT President, feels that "there are precious few things you can rely on in recent times. Chrissy Bryant and Terry's Chocolate Orange. That's about it. And we're bloody lucky we've still got both."

Richard Slocock, an early WTT chairman, says that "Chrissy was an absolute rock during my chairmanship, always forgiving of my ropery admin skills and always good for a lovely chat, so cheerful, so efficient, just perfect!"

Edward Twiddy, erstwhile chairman among many roles, "first met Chrissy when she was still *The Field's* Agony Aunt, responding to reader's questions about sloe gin and Labrador hip scores. Since which, she's answered every question for WTT members, put magazines to bed, ensured we are on the right side of GDPR, brought in tens nay hundreds of thousands of pounds, organised knees-ups and celebrations and given time beyond



Chrissy with her agility dog, Purdey

measure."

Graham Coley, current day chairman, says "for the past 20 years, Chrissy has provided the firm foundation, with energy, enthusiasm and unfailing commitment, which has enabled the Trust to grow so successfully. We look forward to her next 20 years."

David Marriott, involved from our early days and today's Trust Secretary, works very closely with Chrissy and comments "Directors come and go, as do Trustees, but the one constant throughout the existence of the WTT has been Chrissy Bryant. To most of our members she IS the Wild Trout Trust and without her total commitment over the last 20 years the charity would certainly not have become the success it is today. Thank you Chrissy, your award is well deserved!"

In response, Chrissy said...

"In those early days when I was

asked to lend a hand taking minutes and to organise the conservation awards, little did I know that very soon I would be turning my hand to anything and everything, paddling hard beneath the surface sometimes and rapidly learning to set up and maintain the systems necessary to administer, support and promote the Trust and its wide range of activities, also to provide a public face and a central point of contact. WTT has grown so much since I was its only employee, but my role is still very varied which ensures a lot of interest and satisfaction.

And I love looking after and hearing from members, many of whom I have come to know and regard as friends.

I'm proud to have helped the original band of Trustees and the volunteer Exec Committee and then to support and assist our first Director, Fred Scourse, followed by Simon Johnson; and now the current Director Shaun Leonard, Trustees, Trust Sec David Marriott and the rest of the team.

To have contributed to the growth and success of WTT is fantastic and very rewarding. Not sure another 20 years is on the cards, but I'll certainly be here for a few years yet...

I'd like to thank, very much indeed, those above for their exceptionally kind words and WTT for recognising my long service, not with a fishing rod (phew!) but with a superb hi-fi system that I will enjoy for a very long time."

Huge congratulations, Chrissy; we couldn't have done it without you.

Jon Beer, WTT President, feels that "there are precious few things you can rely on in recent times. Chrissy Bryant and Terry's Chocolate Orange. That's about it. And we're bloody lucky we've still got both".

Farewell SM-S

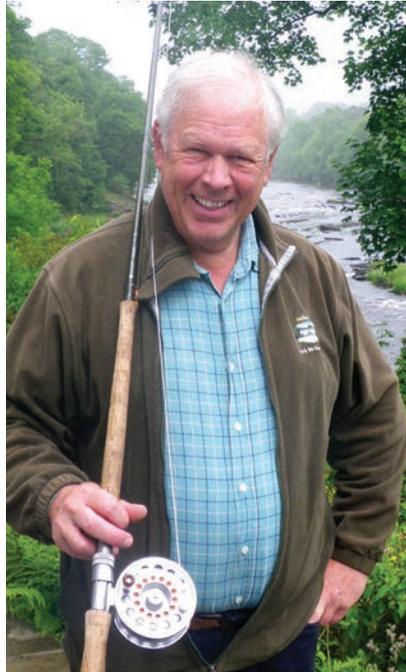
We were very sad to hear that Stephen Marsh-Smith OBE died in August 2020, aged 69. He was the founder of the Wye & Usk Foundation (WUF) and leaves a long-lasting legacy to the Foundation as well as to the rivers trust and environmental movement.

Simon Evans, Chief Executive of WUF, said the Welsh environment sector had lost a "force of nature", calling him a "colossus of the environmental movement."

"Stephen was instrumental in the formation of the rivers trust movement and this idea of normal people getting involved in trying to look after their rivers in a way that statutory bodies were unable to do so" Evans said. "Over time the government has seen us as a key delivery partner in trying to make things better. And we now have a say in how the environment is

managed - that's a lasting legacy."

In 2011, Stephen was awarded an OBE for services to the environment and conservation



Stephen Marsh-Smith

of the Wye and Usk. Five years later, he stepped down as Chief Executive of WUF to become the head of Afonydd Cymru, the umbrella organisation for Welsh rivers trusts. He retained an important role as Advisory Director for WUF, representing the Foundation at ministerial level and guiding staff and trustees with his wealth of experience and expertise.

An avid salmon angler, Stephen lived life to the full. In his youth, he was a member of the England international flyfishing team although he always gave the impression he would have much preferred to represent Wales.

His immense presence will be very much missed by all those who knew and worked with him. Our thoughts are, of course, with his wife Seren, his son Edward and his daughters, Henrietta and Georgina.

Jim Glasspool

Jim Glasspool sadly died in September 2020. He was the Secretary of the Test & Itchen Association for 20 years, then a member of the T&I Board and a Trustee of the Wessex Rivers Trust. He was instrumental in the formation of both the Angling Trust and the Wessex Rivers Trust. Always a gentleman, quietly spoken but utterly determined, he dedicated his retirement to his beloved chalkstreams and to angling. He was fishing on his beloved Itchen only a few days before he died.



The lower beat of Rochienne's water on the Itchen

Rochienne Pearce

Rochienne Pearce sadly died in August this year. She was the dedicated and caring owner of a beautiful stretch of the River Itchen near Winchester, and was well known locally and by the 'rods' who were lucky enough to fish her water -

including the late John Goddard (who Rochienne called 'God') and Brian Clarke. Always full of bounce and enthusiasm, it was a joy to meet her on the riverbank. Our thoughts are with her partner, Colin, and her family.

WTT GOODIES

WTT memberships and goodies can be ordered via the Shop on our website at <http://www.wildtrout.org/>, or by sending your order and cheque to the WTT Office. P&P prices are for UK second class, please enquire for overseas.



ENAMELLED MUGS

Grab one of these stunning WTT enamelled mugs. Big enough for a good cuppa but small enough to take fishing, camping or just out in the garden. Size 10 oz. Not dishwasher-safe. £9 plus £3.30 p&p

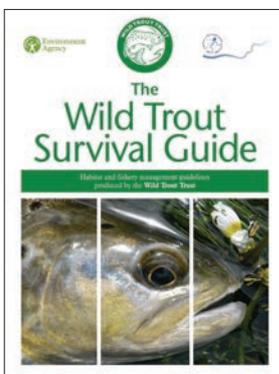
CAR STICKERS AND BADGES

Car stickers £1.60
Pin badges £3.85
Cloth badges £4.60
all inc p&p



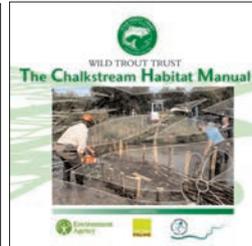
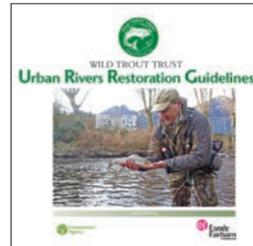
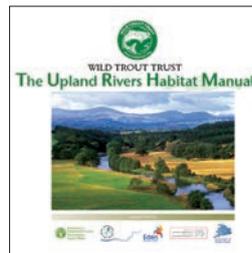
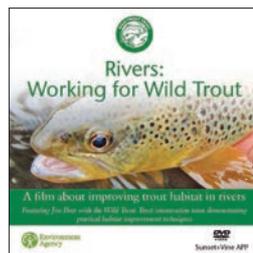
ORVIS CAP

£15 plus £3.30 p&p
One size only



THE WILD TROUT SURVIVAL GUIDE

£10 plus £2 p&p



CDs

The Uplands River Habitat Manual
The Chalkstream Habitat Manual
Urban Rivers Restoration Guidelines
Rivers - Working for Wild Trout
£10 each plus £1.15 p&p

FREEPOST

Our Freepost address is: Freepost, WILD TROUT TRUST. If you use one of our pre-printed envelopes or one of your own, please don't write anything else on it as the Post Office will surcharge us if you do. Thank you.

CONTACT US

THE WILD TROUT TRUST

Registered Charity
1162478 (England & Wales)
SCO46354 (Scotland)
Charitable Company No. 03345901
Registered in England & Wales

WILD TROUT TRUST OFFICE

Christina Bryant
Trust & Data Manager (including membership)
The Wild Trout Trust, PO Box 120,
Waterlooville PO8 0WZ,
office@wildtrout.org / 023 9257 0985

DIRECTOR

Shaun Leonard
director@wildtrout.org,
07974 861908

RESEARCH & CONSERVATION OFFICER

Jon Grey

The North
jgrey@wildtrout.org

CONSERVATION OFFICERS

Tim Jacklin
N England, Midlands, Anglian,
N Wales
tjacklin@wildtrout.org
Andy Thomas
Southern, Thames, S West,
South & Mid-Wales
athomas@wildtrout.org
Paul Gaskell
Trout in the Town (North)
pgaskell@wildtrout.org
Theo Pike
Trout in the Town (South)
tpike@wildtrout.org
Rob Mungovan
Eastern & Central England
rmungovan@wildtrout.org
Gareth Pedley
The North

gpedley@wildtrout.org
Nick Lawrence
Southern, Thames, S West,
South & Mid-Wales
nlawrence@wildtrout.org

COMMUNICATIONS OFFICER

Denise Ashton
dashton@wildtrout.org,
07802 454157

FUNDRAISING EVENTS OFFICER

Bruno Vincent
bvincent@wildtrout.org

COMPANY SECRETARY

David Marriott
office@wildtrout.org

NEWSLETTER

**Denise Ashton, Rebecca Hawtrey,
Christina Bryant, Shaun Leonard**

WTT ANNUAL DRAW THURSDAY 17 DECEMBER 2020

Do please buy a ticket or two or more... and encourage your friends and colleagues to do likewise.

Tickets cost £1 each. We have some lovely prizes as listed below and all proceeds are used wisely in our habitat restoration work. Please use the order form enclosed with this Newsletter or visit the shop on our website at www.wildtrout.org. We will complete the counterfoils and send you the corresponding tickets by post or ticket numbers by email, whichever you prefer.

Thank you for your support and good luck!

1ST PRIZE KINDLY DONATED BY SAGE, WORTH APPROX £1000

A Sage Single Handed Fly Rod of your choice from the range current at the time of the draw to which will be added an appropriate reel and line.

2ND PRIZE KINDLY DONATED BY THE PEACOCK AT ROWSLEY & HADDON FISHERIES, WORTH £470

One night's accommodation in a large double/twin room for 2 people with 3 course dinner and buffet breakfast, plus 2 low-season tickets to fish the Derbyshire Wye. 2021 season.

3RD PRIZE KINDLY DONATED BY WILLIAM DANIEL & FAMOUS FISHING, WORTH £450

A day's fishing for 3 rods on 1½ miles of the Lambourn at Weston. 2021 season by arrangement on a Monday, Tuesday or Wednesday after 30 June.

4TH PRIZE KINDLY DONATED BY GEORGE & ANN EATON, WORTH £120

A day for 2 or 3 people (can be parent and child) to watch wildlife from a 'high seat' in a tree at Rectory Farm, Bucks to see badgers, muntjac deer, hare, owls and foxes. Summer 2021.

5TH PRIZE KINDLY DONATED BY JAMES LANFEAR OF JIM'S LURES, WORTH £80

A pair of exquisite, wooden fishing lures, hand-crafted in Devon by James Lanfear of Jim's Lures.



PLEASE ENSURE ORDER FORMS ARE RECEIVED IN THE WTT OFFICE BY WEDNESDAY 16 DECEMBER
Please use our Freepost address and allow 5 working days. Tickets can be ordered via the shop on our website until 5pm on Thursday 17 December.

EVENTS

WTT AUCTION

Our annual fundraising auction will take place 19-28 March 2020. Please contact Bruno Vincent (bvincent@wildtrout.org) if you would like to offer a new or repeat lot.

THREE-FLY CHALLENGE

Sadly postponed in 2020 due to the pandemic, we plan to hold the Three Fly Challenge on Saturday 19 June 2021 at the Meon Springs Fishery near West Meon in Hampshire. This is a simply brilliant day of fishing and camaraderie, with lots and lots of laughter, all raising excellent funds for WTT. Tremendous prizes

including Sage rods and elegant trophies. Many other runner-up prizes. A raffle will be held at lunchtime. The Three-Fly Challenge is a fishing tournament that will test your skills and catching ability as you will only be able to use three flies (one at a time), these will be provided on the day: Kites Imperial dry (3 points per fish); Black buzzer (2 points per fish); GRHE nymph (1 point per fish).

WTT MEMBERS FISHING WEEKEND ON THE DERBYSHIRE WYE

The members fishing weekend on the River Wye at Haddon in Derbyshire took place in July this



year and raised £680 for the WTT. The pandemic restrictions meant fewer members were able to attend than usual, but a thoroughly good time was had by all who were able to join. Thank you so much to the Haddon Estate and to Jan Hobot, the Head Riverkeeper. Another fishing weekend is planned for 2021 and members will be notified of the date in due course.