

Issue 12 | February 2021



**Wessex**  
Rivers Trust

# WESSEX RIVERS NEWS

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FReSH Water  
Programme -  
developing  
drought resilience

Fish Surveys -  
an indicator of  
restoration  
success

Special Feature -  
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Scheme



# Chair's Introduction

*George Seligman, Chair of Trustees*



*River Avon, Salisbury*

I am sure you were pleased to see the back of 2020. What a dreadful year! It started so optimistically: looking back at the January newsletter of Wessex Rivers Trust we expected it to be like any other busy year. By the time of our offering last June life had changed radically, but we still thought things would be better shortly. Sadly, from the middle of this third lockdown it is all rather more sobering. So I am delighted that this magazine brings many rays of sunshine even into these grey winter days.

Despite the pandemic, home working and all the other challenges, Wessex Rivers Trust put in a strong performance in 2020. Amazingly, we have continued to expand both in numbers of staff and the range and scale of river projects undertaken. Helping with urban renewal in Salisbury, reprofiling of tiny winterbournes, mill bypasses for migratory fish and catchment scale improvements – there are articles about all of these in this magazine.

Looking back over the last five years, the thing that strikes me most is the increasing size of projects which are being entrusted to Wessex Rivers Trust by landowners, the Environment Agency, local councils and major corporations. This is tremendously satisfying for trustees and staff alike. It can also be quite nerve wracking. The bigger they are, the harder they fall!

Education has been the only part of our work which had been badly affected by the pandemic. Our Education Officer and others have produced all sorts of online

materials for schools which, we hope, are helping hard pressed teachers. There have been a few riverside visits – you will see a charming article about cub scouts and kick samples in this edition. But we are all, like many of you, longing for the schools to go back and for us to get the children out on the rivers.

As I mentioned in my last introduction, our CEO, Dr. Martijn Antheunisse, left in the summer of 2020 to return home to The Netherlands. Dr Dave Rumble joined us in August. Poor man, sometimes he must wonder what has hit him! Martijn did an excellent long distance hand over (he was prevented by travel bans from getting back in to the UK after moving his family back to The Netherlands) and then Dave was sailing on his own. It has been a frantically busy few months for him with tier restrictions and this third lockdown to cope with, some massive new projects (the Southern Water FReSH Water programme is described in this magazine and there are others yet to come) and all the natural anxieties of a new boss taking over. Dave has coped extremely well and we are delighted to have him with us.

2021 has got to be a better year – fingers crossed. Spring is nearly here, there has been plenty of water to refill the aquifers this winter, we have had one of the biggest salmon runs in recent memory coming up the River Test, and Wessex Rivers Trust has got plenty of work to do. So it is not at all doom and gloom. I hope you all stay safe and many thanks for the support you have given us over the years.



# CEO's Introduction

*Dave Rumble, Chief Executive*

At a time when many organisations have been paralysed by the pandemic and its constantly changing environment of restrictions, the team at the Trust has been able to go further than ever before. Ambitions were always high, but through the uncertainty we have even managed to grow with two new team members and new programmes for work. My first months in post have been rewarding and challenging in equal measure, not least ensuring that our staff and volunteers stay safe. Through immense flexibility, conscientiousness, and determination the team has been able to achieve so much and this edition of *Wessex Rivers News* is a great testament to that. Importantly we have maintained a vivid dual focus: one eye on the horizon and one on the river, and we have probably spent as much time scanning our catchments and securing opportunities as delivering the practical improvements we do so well. But these remain times of unprecedented change and uncertainty and we need our supporters' help to achieve our mission more than ever. I hope you feel inspired to support us in new ways and that 2021 gives you new opportunities to appreciate what our rivers and their catchments give back to us all.



*Wessex Rivers Trust staff at our socially distanced Christmas staff meeting*

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*Some of the team out surveying and filming on the River Test*



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# Bryanston Weir Bypass and Restoration

*Maddie Crabb, Trainee Project Officer & Neil Swift, Project Officer*

Last year the Trust created a route for fish to bypass Bryanston weir, a 2m high impoundment on the Dorset Stour utilised by Bryanston School to make rowing possible in the river. An old pump house had its sill notched and a sluice lifted allowing water to flow again to a forgotten leat. This leat now provides passage for fish to bypass Bryanston weir for the first time in decades. Habitat enhancements began in Autumn 2019, when large woody material was installed to provide refuge and habitat diversity for both coarse and salmonid species alike. But we didn't stop there.

Whilst the leat now provided passage past the weir and much improved habitat, there was one vital piece of the puzzle that was missing – somewhere for fish to reproduce. Although our 2019 work meant that the channel was now flowing nicely, it did not contain any suitable spawning habitat. So, in Autumn 2020 we returned to Bryanston School to install a series of spawning gravels.

The plan was to introduce four sections of gravel bed along the course of the leat. Our 2019 works had created areas of fantastic nursery habitat in amongst the woody material that would mean any newly hatched fry would have the best possible chance of survival. To ensure there were plenty of fry to take advantage of this we needed to make certain that the gravels were well placed to provide good spawning conditions.

The process of creating spawning gravels is relatively simple, however, it is important to get it right. For fish to spawn successfully there needs to be a good flow of water over the gravels - this stops sediment from settling and keeps the eggs well oxygenated. 20-40mm gravel was brought to the site and carefully placed in the river using an excavator. This raised the bed and the flow rate over the gravels increased. All that was left to do was to hop into the water with a rake and make any final adjustments by hand, ensuring the gravel was spread right to the margins.

The stretch contains a diverse community of fish species and it is not just salmonids that use gravel to spawn on. Chub, dace, and barbel use gravel to spawn during the summer months, whilst trout and salmon spawn during the winter. With all these species present in the Stour we hope the new gravels will help produce many generations of various fish species in the years to come.



*Notched pump house sill, allowing water to flow again*



# The Art of River Restoration

*Joshua David, Volunteer Project Officer*

Often, the most publicised part of habitat improvement is the physical restoration. There can be little doubt that watching a weir crumble, or an over-deep river fill with gravel is one of the most satisfying parts of the process, and it certainly attracts the most attention from members of the public! It is, however, only one of the final stages of a long and often laborious process, the majority of which is easily overlooked. One of these less glamorous, but no less essential tasks, is creating existing and proposed site drawings. At Wessex Rivers Trust, we currently use CorelDRAW, a vector-based graphics software program. In layman's terms, we superimpose detailed maps over satellite imagery, using a transparency filter to help us trace-out key features at a set scale. This allows project officers to account for vegetation cover or any recent geographical changes to the site, while also considering access for materials or plant machinery.

Though simple to make, the large volume of drawings required for each project often means drafting in colleagues not necessarily working on a particular project. There were over 50 sites requiring multiple drawings for the FReSH project alone during 2020. That is over 200 drawings!

Each drawing keeps to a standardised format, and some sites may be made up of one "master" drawing and several smaller detail drawings, with different scales needed for plan view, long, or cross section illustrations. These may be referred to when designing, consenting,

and delivering projects, so accuracy is of the utmost importance. These plans are often printed at the required size (A2, A3, A4 etc.) and taken to site to be referred to or scribbled on.

The Trust-wide use of accessible vectoring software has made our design process considerably quicker, becoming increasingly more efficient as the software continues to improve. Standardising our work via a combination of design software and Geographical Information System software ensures that any team member can open plans and easily understand the intricacies of the site and project. This has been especially important over the last year; with very little time being spent together in the office, keeping a clear and easily accessible collection of plans has been instrumental in maintaining the smooth running of normal proceedings. Vectoring software also makes it quick and easy to adjust designs around unexpected site constraints or stakeholder concerns. Points and lines can be quickly altered, and a new scale drawing 'version' saved. Something that would take several hours to undertake by hand.

With so many drawings now 'active', the Trust has been striving to manage quantity without losing quality. Making use of modern software helps to streamline the processes, allowing for rapid quality-checking and sign-off. CorelDRAW is one of the many new software tools that are helping the Trust to grow, even through these most difficult of times.



*Plan view drawing of existing features at a project site*



# Pillhill Brook Habitat Restoration

Andy Blincow, Senior Project Officer



Image demonstrating new channel profile

Despite its challenges, 2020 has proved to be a successful year for project delivery across the Wessex region. One of the most satisfying projects was the restoration of a reach of the Pillhill Brook, a small winterbourne tributary in the headwaters of the Test.

Set within a sensitively managed wet woodland, the site comprised a historic mill leat, which was significantly over-wide, straightened, and over-shaded by trees. These conditions had resulted in degraded in-channel and marginal habitat. Consequently, limited floral and invertebrate biodiversity, most likely resulted in a population bottleneck to wild fish (e.g. Brown trout *Salmo trutta*) at the juvenile life-stage. Uniform sedimentation and a localised lack of in-channel plants served to compound channel uniformity, exacerbating the problem. This would in-turn exclude piscivorous predators such as otter *Lutra lutra*, little egret *Egretta garzetta* and kingfisher *Alcedo atthis*.

The aims of the project were to: rebalance light conditions, improve flow diversity, and reinstate natural geomorphological processes. As a result, over time, an increase in the abundance and diversity of natural chalk stream habitat features would improve biodiversity

within the restored reach. These aims were achieved entirely through the use of woody material won from the site therefore keeping the project 'light touch'. Thankfully, there was no shortage of woody material for a team of Trust staff and much-appreciated help from a couple of well-trusted 'hired hands' to get their (chainsaw) teeth into. Whilst the abundance of diseased and dying ash lent itself to use in large woody berms, the compacted gravel bed meant that a fencing spike had to be used before each of the 50+ chestnut securing posts could be driven in. A painstaking task! Respite came in the shape of some semi-mature crack willow, providing a perfect opportunity for live-hinging of some large woody structures. The main benefit of this method is that the structure remains live within the river, continuing to put out roots and new growth long after the echo of the chainsaw is gone.

Five days, twelve structures, far less shade, and 250m of channel later, the transformation was complete. What was once a sluggish and over-wide channel is now a sinuous and bubbling stream, more akin to the winterbourne brook that its name suggests. Fortunately, just in time for a socially-distanced drink in the local pub garden to finish off the week!



# Bourne Rivulet Fish Passage Easement

*Andy Blincow, Senior Project Officer*

Our summer newsletter featured an article in which progress on the planning and development of capital works projects for the Watercress & Winterbournes, a Landscape Partnership Scheme supported by the National Lottery Heritage Fund was detailed. We are happy to report that despite another lockdown the Trust and partners have delivered a number of those projects in autumn 2020, with more scheduled for delivery in spring 2021. These include projects aimed at chalk stream habitat restoration, fish passage, and stopping diffuse sediment. In addition, further good news is the welcoming of Moragh Stirling to the Trust in November 2020 as the scheme's Projects and Conservation Officer. Moragh has joined us from the South East Rivers Trust and will be the Trust's lead for the development of projects within the scheme going forward.

The Trust designed and acquired consent for a project to ease fish passage through a relic water mill in the mid-lower reaches of the Bourne Rivulet in the Test catchment. The project aimed to enable a range of fish species, primarily resident brown trout, to migrate through the site thereby linking excellent quality spawning, nursery, and adult habitat for many kilometres upstream and downstream of the historic barrier.

The Trust appointed river restoration contractors Cain Bio-Engineering to deliver the works in November 2020. The contractor installed a rock ramp style fish pass within an existing overspill channel to facilitate fish passage up and downstream. The overspill channel, previously identified as the most suitable route for

passage, comprised a series of shallow pools and weirs with a poured concrete bed preventing upstream passage of any fish species. During the works the weirs within the existing channel were 'notched' and the bed level raised with mixed-grade rock and gravel, creating a more natural sinuous rock ramp with resting pools and streaming flows. A further weir approximately 50m downstream was also notched to enhance flows for attracting fish to the fish pass channel. In addition, all hatches within the site were reconditioned with replacement oak boards and chains to allow better control of water levels and flows through the site. This ensures the operation of the fish easement in a range of flow conditions and will help manage debris during the weed cut. The works were completed on-target prior to the salmonid spawning season and downstream water quality was safeguarded during works by the temporary drying of working areas and the use of over-pumping where required.

Staff from the Trust will repeatedly revisit the site over the coming year, making minor adjustments to the structure where necessary and working with the highly receptive landowner to produce a best practice water level management plan for the site. It is hoped that in the long-term the works will guarantee fish passage up and down the Bourne for many decades to come, improving the resilience of this wonderful winterbourne stream to climate change and any unknown future challenges.



*Before works*



*After works*



# FReSH Water Programme

*Mike Blackmore, Head of Project Delivery*

Some aspects of river restoration are easier on chalk streams compared to 'normal' rivers, chalk and flint are resistant and predictable. You can afford to be brave, to make bold changes with relative certainty as to the outcome. This ironically, is also why so many of them *need* restoration. Historic modifications that other rivers easily (sometimes violently) overcome, tend to last a very long time on chalk streams. Without intervention, a damaged chalk stream stays damaged.

Conversely, other aspects of river restoration are more difficult on chalk streams compared to 'normal' rivers. River restoration is a clash of natural and human heritage, the historic modifications we seek to address being linked to changes in land use and economics that are themselves part of our shared history. Usually, this conflict is between the past and the present, but on the chalk streams, perhaps more than any other rivers, we have quite contemporary clashes of heritage. This is exemplified on the River Test where British fly fishing was born and continues to thrive. Fly fishing is so valuable to the local economy that, in stark contrast to most of the country, river restoration doesn't start until the fishing season ends. Access for anglers, space for casting, holding lies for fish, equality between 'half-water' riparian owners (different people owning/fishing opposite banks), all must be factored into restoration designs. The Test valley also boasts an incredibly high density of protected habitats, species, and Sites of Special Scientific Interest (SSSIs), both opportunity and constraint. Striking the balance between ecological improvement and angling is challenging. Get it wrong and you could fail to achieve meaningful improvements, or you could disenfranchise fishery owners/managers, losing the river's most influential stakeholders. We can only restore rivers *with* the people that own, manage, and use them.

The *Flow-Resilient Sustainable Habitat* (FReSH) Water Programme has been faced with these challenges from the outset. If you're unfamiliar with the programme, more information can be found on our website. In short, it's part of a partnership effort to address Southern Water's growing water supply challenges. In 2019, many (supposedly perennial) chalk streams in the South East dried up. In 2020, the buffer afforded by the very wet winter of 2019/20 was rapidly depleted by a record-

breaking hot and dry spring. Our weather is increasingly extreme and our fragile chalk streams, modified for a different time and outpaced by the rate of change around them, are ill-equipped to adjust.

In 2018, Southern Water acknowledged that it could only meet domestic demand during a drought by abstracting more from certain sites, likely harming the ecology of parts of the Candover Brook, River Itchen, and lower Test. Plans have been drawn up by the company for alternative supply, including a surface water reservoir and desalination plant. However, it will be at least 10 years before alternatives are ready which is too great a risk for our rare and fragile chalk streams already under stress from drought.

So in addition to separate mitigation measures to limit the potential impacts at abstraction sites, Southern Water is funding *compensation* (creation of additional habitat) for the Special Areas of Conservation (SACs) that could be affected. For complex reasons, this means creating/improving habitat on the Test, Meon, Dever, Dun, and Bourne Rivulet to compensate for the River Itchen and Candover Brook SACs.

Wessex Rivers Trust was approached in late 2019 and asked to deliver the river habitat part of this compensation work. After careful consideration the Trust agreed: the programme would be a once in a generation opportunity to work at a significant scale and leave the chalk streams in a better condition. Nevertheless, we acknowledged that the programme was necessary because of a growing population and historical under-investment in alternative water



*Brown Trout, Salmo trutta*





*A great example of a Wessex chalk stream*

resources, reducing leakage, reducing water-use, and recycling water. The Trust concluded that the only right action was to both reduce abstraction *and* make our rivers more resilient, and we remain committed to make sure they *both* happen.

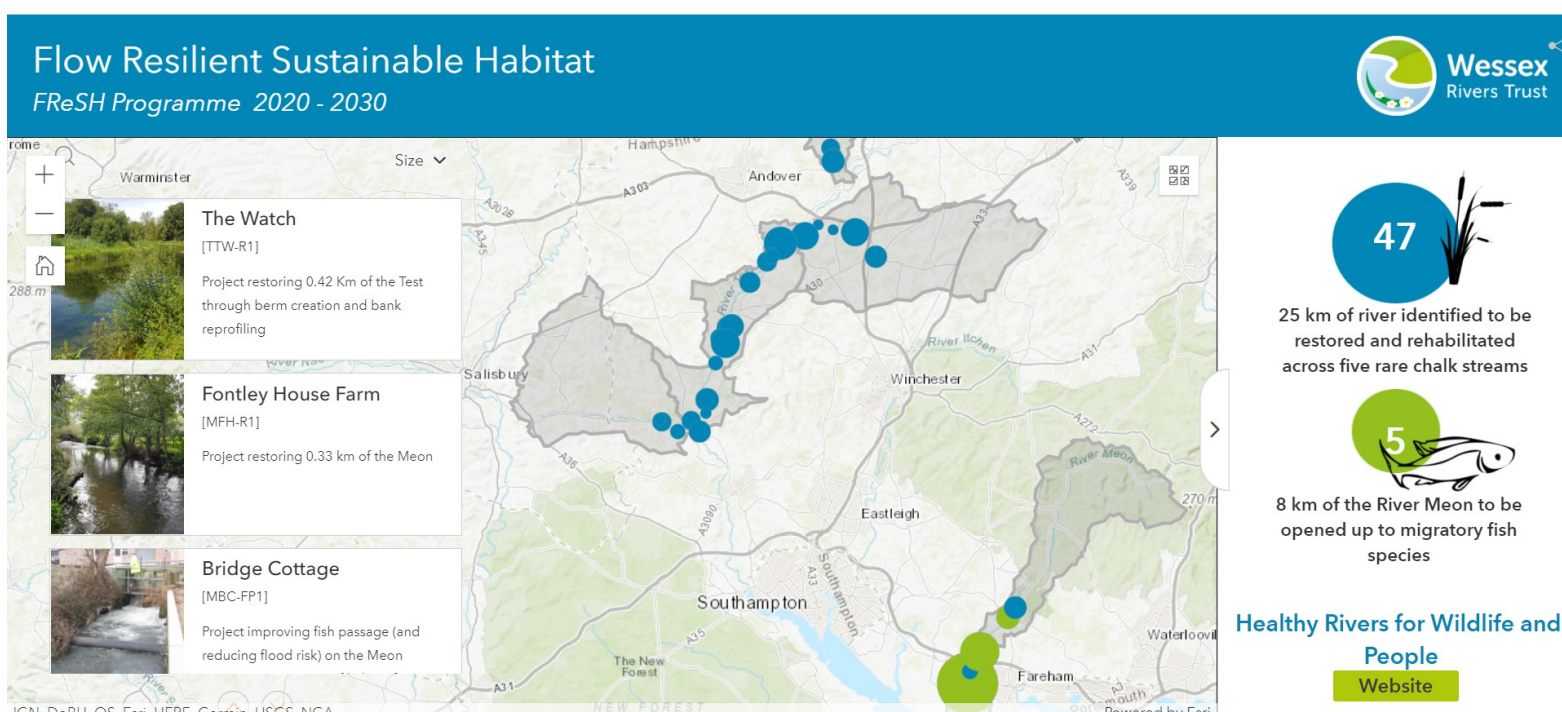
To develop the programme, we'd have to engage with landowners, fishery managers, and anglers on a massive scale, we'd have to navigate mosaics of protected habitats, we'd have to design, cost and agree upwards of 25 km of river restoration and 4 fish passage improvements, and we'd have to do it in under a year, during a global pandemic. Difficult? Yes. Impossible? ... well almost!

At the time of writing, the FReSH Water Programme consists of 52 separately visited, designed, and costed projects. This amounts to over **25 km of improved river**, with an estimated **37 hectares of habitat improved on**

**the River Test alone.** All of them accurately GIS-mapped, designed (*with* stakeholders), drawn-up, costed, and programmed. This herculean effort, undertaken during one of the most difficult years of the 21<sup>st</sup> century, could only have been achieved with the help of the Wild Trout Trust, riparian owners, river keepers, the Environment Agency and (of course) a massive, grinding team effort from my colleagues at Wessex RT. I could not be prouder of them!

So as 2020 finally drew to a close, we looked toward the next challenge, delivering all these projects within our yearly one-month window (between the end of the fishing season and start of the spawning season).

Technically we have 10 years to deliver the programme, but we are aiming for 5. Why you may ask? We all fear a drought is well overdue and we therefore want our chalk streams to be as drought-resilient as soon as possible, and the Wessex Rivers Trust team like a challenge!



*Map of project locations on the Test and Meon*



# Introducing the Wider Wylfe Strategy

Alex Deacon, Catchment Partnership Manager

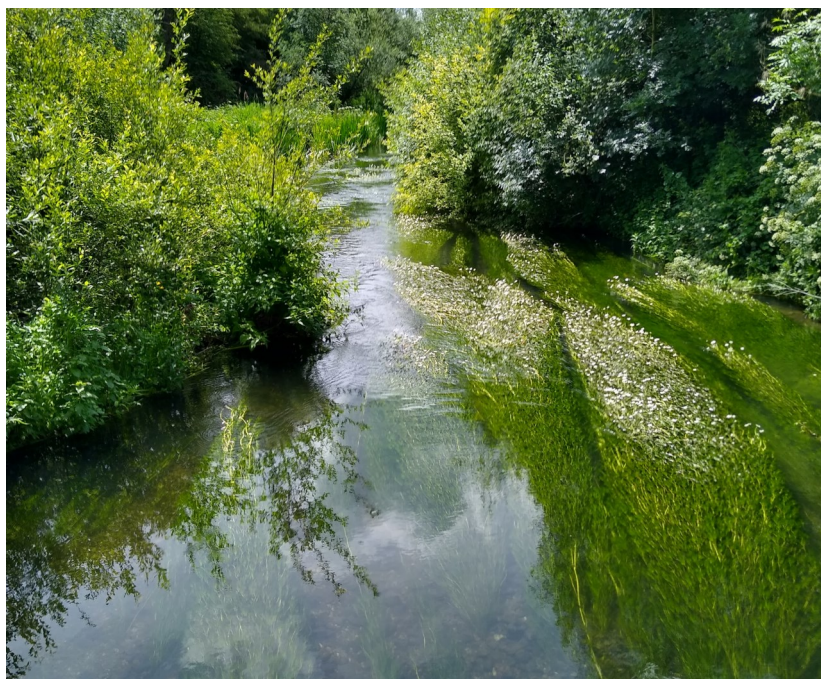
**The Wider Wylfe Strategy brings together a series of projects and programmes of work which aim to enhance the Natural Capital value of the Wylfe catchment. Increasing the resilience of this unique chalk stream in the face of our rapidly changing climate.**

The River Wylfe is one of the most revered chalk streams in southern England, famed for its unique and rich diversity of aquatic flora and fauna, including some of the nation's most iconic species, such as salmon, wild brown trout, otter, and water vole. Consequently, the Wylfe is recognised as one of the very few river catchments in the country afforded protection under both National (Site of Special Scientific Interest) and International law (as part of the River Avon Special Area of Conservation).

Not only is the Wylfe a home for wildlife, but the health of this natural environment also underpins our regional economy, and the wellbeing of our local communities, providing us with clean and plentiful drinking water, productive agricultural land, a store of carbon, water and nutrients, and access to nature. Yet despite our reliance on the catchment, we have placed the long-term health and integrity of these natural assets and biodiversity at risk.



*Engaging with riparian owners aims to reduce the occurrence of sights like this along our river banks: over-zealous marginal management of vegetation does little for the health of our chalk streams.*



*The middle reach of the Wylfe in all its glory!*

## What can we do?

The Trust and our partners believe a more joined-up approach to land and river management is required to address the diversity of challenges facing the Wylfe. Teaming up with our partners at Wiltshire Wildlife Trust, we aim to bridge the gap between land and river managers and improve the public's connection to the natural environment.

With a five year (2020-25) £75,000 grant secured through Wessex Water's Biodiversity Partners Programme, the Wider Wylfe Strategy will lay the foundation for positive change in the catchment.



## How can we do it?

Our project team have already begun engaging with local farmers and landowners in the catchment, surveying and assessing options to enhance our rivers on a landscape scale. Opportunities to restore degraded reaches of the river channel, reduce sediment run-off, improve water quality through changes to land management are just some of the options being explored. By investing in these plans and project development process, we believe the Trust, our partners, and the local farming community will be in a strong position to deliver a wide array of benefits via a range of new and incoming environment schemes, notably the incoming Environmental Land Management Scheme (ELMS).

Our education and engagement teams will also be reaching out to the younger generations and local communities in the catchment. Increasing the general public's connection with and understanding of nature, and the role their local river plays in their day to day lives, is key to ensuring the Wylfe is cherished and protected for the future.



# River Dipping at Dusk!

Amy Ellis, Education and Engagement Officer



With the threat of darker evenings looming, 1<sup>st</sup> Downton Cubs managed to squeeze in three Riverbank Sessions in September last year. Longford Estate were very accommodating and allowed us to use their stretch of the River Avon to river dip, and we met with the tenant farmer to ensure the cattle would not disturb our session!

The cubs were split into three smaller "bubbles" and each cub had their own set of equipment, to comply with government coronavirus guidelines. With Amy leading the sessions (who also happens to be an Assistant Cub Leader!) and help from Maddie and Dave, the young people had a wonderful time, discovering what lies beneath the surface.

With only the adults able to do the kick sampling, the challenge was on to see who could gather the most

exciting species! There were many Freshwater shrimp (*Gammarus pulex*) and Water beetles caught, along with the occasional Mayfly nymph. Soon the competition ramped-up when the first Bullhead (*Cottus gobio*) was captured and every cub demanding we work harder to fill their trays with "more interesting" fish, such as "sharks, tadpoles, and water snakes". Sadly, we could only manage many more Bullheads and a few Minnows (*Phoxinus phoxinus*). One session did, however, have a star of the night with a Brook lamprey (*Lampetra planeri*) making an appearance. We were not sure who was the most excited about this, Maddie and Amy or the cubs!

This small taste of River Education has got Amy pushing forward with plans for Spring 2021, where we will hopefully be able to deliver a more "normal" education season.



# Enhancing Salisbury's Rivers

*Ellie Challans, Planning Lead, Salisbury River Park Scheme, Environment Agency*

The Environment Agency and Wiltshire Council are planning a vibrant new feature in Salisbury, in the form of a River Park. Flood risk reduction forms the basis of it, but other fantastic benefits will be integrated into the

project to create a valuable resource for the people and wildlife. The project is well supported within Wiltshire Council policy: Central Area Framework, River Park Masterplan and Maltings & Central Car Park Masterplan.



*River Park concept set by the Salisbury Central Area Framework*



## Benefits will include:

- Flood risk reduction for 250 homes and 100 businesses
- Creation and enhancement of habitat
- Enabling of regeneration
- Improved fish passage
- Better pathways and cycle paths
- Upgraded bridges
- Improved climate change resilience
- Removal of aging and costly flood control structures
- Riverside recreational areas, with access for people

We are currently working on phase 1 of the River Park for which planning permission will be sought in Spring 2021. Regular public consultation and stakeholder input guided the design of the River Park, which focuses on two main sites during phase 1 – Maltings & Central Car Park and Fisherton Recreation Ground & Ashley Road Green Space.

At the Maltings area the River Avon channel will be significantly altered to form a 40m wide green/blue corridor with habitat creation on the eastern bank and a more formal riverside park on the western bank. Minor changes will be made to the Mill Stream, which will also create new habitat.

At the Ashley Road area a low flood embankment/wall will flank the southern boundary of the open space. The Summerlock Stream will be lengthened and will flow through a new area of wet woodland, with features like boardwalks to encourage enjoyment of the area. All measures as part of the scheme are designed to enrich this valuable stretch of SSSI and SAC riverine environment.

We are very thankful to have received so much positive support from the people of Salisbury and stakeholders. Some brilliant ideas and suggestions have been made and we have woven these into the design of the River Park where practicable. By doing so we hope the people of Salisbury will feel the scheme is being created by them, rather than imposed upon them. Enjoyment of the rivers is likely to increase for many years to come. A strong foundation will be created for future development to celebrate the River Avon and really make the most of it, in turn improving the local economy, tourism and wellbeing of Salisbury.

If you'd like further information or to get involved please send your contact details to:

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



*The photograph above shows the existing view from adjacent to Millstream Approach bridge facing south down the River Avon channel. Below this, an artist's impression shows what the widened and re-profiled river corridor will look like once planting has established.*



# Measuring the Impact of our Projects

Alex Deacon, Catchment Partnership Manager



In last January's magazine, I outlined the reasons behind the Trust's fish monitoring programme, accompanied by the results of our pre-restoration surveys. In essence, ecological surveys help us understand how, in this case, fish populations respond to our efforts to improve the health of our rivers. Results can also inform future work, helping us to refine and improve our approach to deliver more for the environment.

One year on, and the results of our post-restoration fish surveys on the Dorset Stour and Upper Test are in. Dodging nettles, brambles, razor-toothed pike and swarms of rather angry wasps, our survey team successfully completed post-restoration fish surveys at both sites, providing us with a useful insight into the short-term impact of our projects.

Starting at our Bryanston weir bypass restoration site on the Stour, our post-restoration surveys recorded a slight increase in the population density of coarse fish, particularly dace and chub.

We also recorded wild brown trout for the first time at the site. Trout, dace and chub are rheophilic, meaning they favour the faster flowing reaches of our rivers and streams, especially where a clean gravel bed is present.

As well as the removal of barriers to fish passage, our Project Delivery Team installed some large woody debris to create flow diversity within the artificially straight bypass channel. Not only does this aim to help create cover for migratory fish making use of the bypass, but it also appears to have created a valuable habitat for our native coarse fish, with the faster flowing runs favoured by the dace, chub, and trout.

Over on the Upper Test in Hampshire, our survey team were eager to see how the fish population had

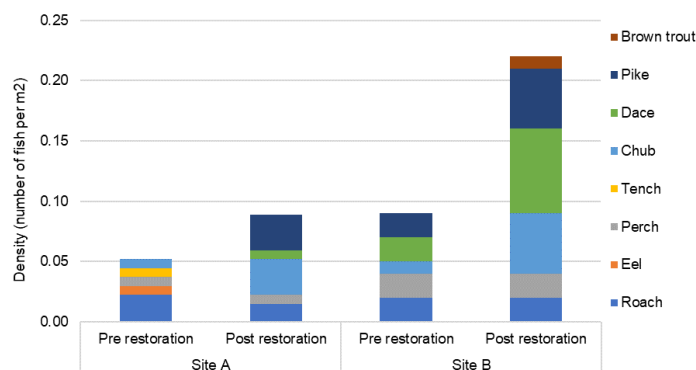


Figure 1: Fish population density recorded at each survey site on the restored bypass channel at Bryanston weir on the Stour near Blandford



responded to our restoration efforts carried out last autumn. Pre-restoration surveys found very few wild brown trout across the four sites, especially in the main river (see Figure 2).

So, it was particularly encouraging to find a relative abundance of wild fish, including juveniles, amongst the restored margins of the river (see Figure 3).

Our results suggest the restoration measures implemented by the Project Delivery team have had a short term, positive impact on the wild brown trout population in this reach of the Upper Test, with the site now providing a valuable nursery ground for trout to develop into mature adults.

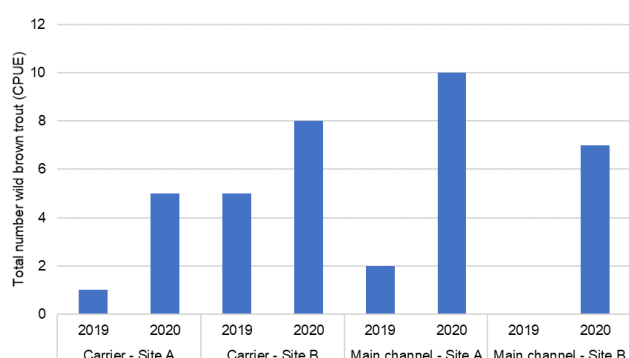


Figure 2: Graph showing the total number of wild brown trout recorded during the pre (2019) and post (2020) restoration fish surveys on the Upper Test

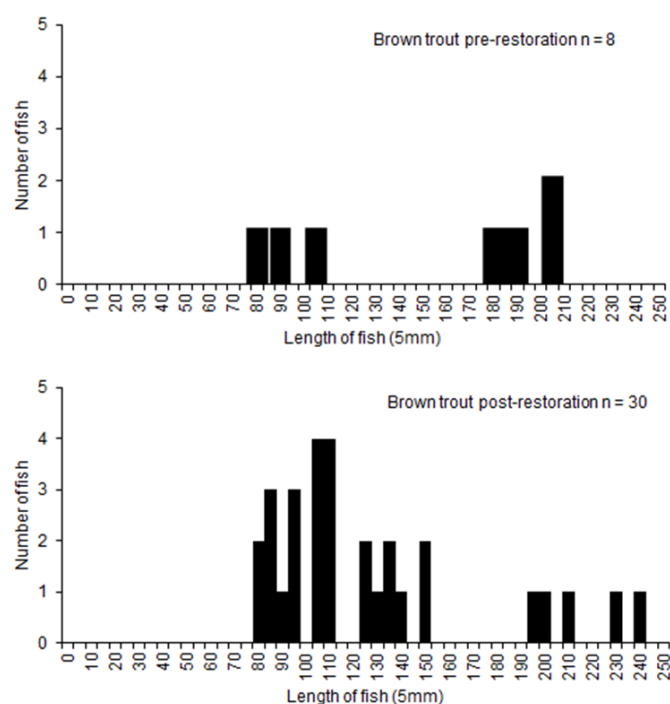


Figure 3: The length frequency distribution of wild brown trout recorded at all four survey sites on the Upper Test pre (top) and post (bottom) restoration.

## Do you have what it takes to be an outdoor educator?

We are looking for fun-loving, enthusiastic, inspirational people to join a team of Education Volunteers for the 2021 delivery season. You can volunteer behind the scenes with session preparation, or choose to be "front of house" wading in the river with the children.

Contact us:

[info@wessexrt.org.uk](mailto:info@wessexrt.org.uk)

07464 471257





# Funding our Education Work

*Amy Ellis, Education and Engagement Officer*



Perhaps not surprisingly, our “riverbank” education work in 2020 was wiped-out due to Covid-19. Schools and teachers have been stretched to their limits, and many pupils have lost 6 months’ worth of education.

With the country going into recession, companies struggling to survive and charitable/corporate funds drying up, financial support is getting harder to come by. Some of our supporters may also not be able to donate as generously as they normally would.

At this time our education work requires a higher level of funding to allow schools to benefit from our services (through part-subsidised sessions) along with a need for more sets of equipment, to allow us to comply with government guidelines. More than ever there is a need to get children back out into the natural world, improving their mental health and wellbeing.

Although we do need to ramp-up our fundraising efforts for the Trust’s education work, it is relatively small amounts of money required compared to many of our projects. So, what can we do about this and how can we fund our education work in the current climate?

We are looking for new sources of support beyond our normal funding routes. For example, we are exploring recruiting business sponsors for schools in their local areas. With a donation of £5,000 we could develop, resource, promote, prepare, and deliver Mayfly in the Classroom sessions for **10 schools**. This will immerse **at least 300 children** into the underwater world of their local river invoking a sense of ownership of this blue

space and a multitude of other positive effects. Can you help us achieve our mission? Contact [info@wessexrt.org.uk](mailto:info@wessexrt.org.uk) for more information.

## Main targets for 2021 and 2022

**Deliver more primary school education programmes across Wessex** – in previously non-targeted areas in the Avon, Stour and Meon, as well as deprived urban areas.

**Community pop-up events** – in urban riverside areas such as Winchester, Salisbury, Southampton, Andover, Romsey, and Amesbury.

**Presence at larger public events** - attending two large events throughout the 2-year period.

**Social media, web presence and digital resources** – with new videos and animated films, produced by primary school children.

**Work placements, work experience and volunteering opportunities** - host work experience or industry placement students and recruit and train Education Volunteers.

**Secondary school education** - one secondary school educational programme developed and piloted.

**Interpretation and nature trails** - design, produce and install one interpretive installation and two nature trails, with the support of local school children.



# Fishing Sale 2021

Lee Bush, Administration Manager



For the last 8 years Wessex Rivers Trust has run an auction of donated fishing days. The auction has gone from strength to strength and is an extremely important source of funding for us, never more so than this year, when other sources of funding are looking threatened by the global pandemic. The auction funds help us to continue with the important work and projects the Trust

undertakes in the Wessex region.

Last year the timing of the auction was unfortunate – as the sale launched we were in the midst of the first Covid -19 lockdown. The uncertainty of whether fishing was to be allowed definitely impacted on last year's bids. We can only be optimistic that the fishing season in 2021 will go ahead as planned with no restrictions imposed.

To that end we are carrying on as normal and will run the fishing auction as in previous years. If you have a day's fishing that you would be happy to donate please let Lee Bush know – [lee@wessexrt.org.uk](mailto:lee@wessexrt.org.uk).

Thanks to those many kind friends and supporters of Wessex Rivers Trust who have generously donated exciting and rarely available fishing days over the last few years. Most of these special fishing days are on private or club waters which cannot normally be accessed by the public.

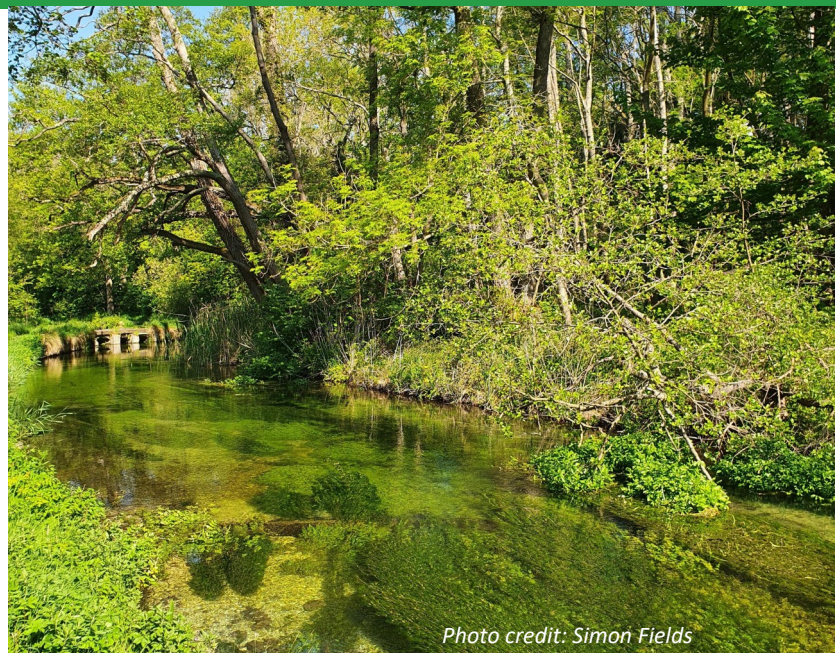
The sale will go live on the Wessex Rivers Trust website in mid-February, so keep an eye out on our website and through our social media.

## Photo Competition

Amy Ellis, Education and Engagement Officer

Last year's photography competition was a huge success with many entries in our three categories; People and Rivers, Riverscapes, and Watery Wildlife. We were fortunate enough to have Jack Perks, Wildlife Photographer, judge all entries, along with our CEO, Dave Rumble. After some tricky decisions they decided to award the prize, of a Rivers Trust water bottle, to Stuart Murray for "First Peak" (above), Simon Fields for "River Dever" (right) and Joshua David for "Little Egret at Dawn" (back page).

We will aim to run another photography competition in the summer, but in the meantime if you have any images you would be happy for us to use in any of our publications we would be most grateful to receive them. Please email [info@wessexrt.org.uk](mailto:info@wessexrt.org.uk).





# Rivers as Natural Capital?

*Dave Rumble, CEO*

Can we put a value on our rivers or are they simply priceless? Does it depend on who we ask? The concept of Natural Capital has been gaining momentum for some time now and is, in simple terms, an attempt to quantify the value to people provided by the natural environment. Many believe nature to be priceless and beyond economics, but Natural Capital can be a helpful way to show that the stocks of many of our natural resources may be in serious deficit, risking losses for society.

Natural Capital increasingly underpins how the Government and businesses make decisions about investment in the environment - landowners are now also beginning to quantify their contribution. At the Trust we have begun to make a case to funders and partners that our work has benefits for Natural Capital; in other words how our work in rivers and their catchments has a measurable value to people.

Natural Capital may be viewed as jargon for good stewardship of land and water. But by presenting our work in terms of the value it creates for people, we may help to secure investment in our rivers and catchments and increase people's appreciation of healthy river systems.



*Kingfisher on the Itchen in Southampton. Photo credit: Tony Bunday*

Here are a few ways in which Wessex RT's work unlocks the Natural Capital of rivers and catchments:

A restored river provides **improved habitat** for juvenile fish and the all-important riverfly community. Our work creates more of these 'engine-rooms' for the natural recruitment of fish stocks which have a commercial value for fisheries and incalculable benefits for society through a richer display of wildlife and efficient interception of pollution.

We are delivering a growing number of projects which provide **Natural Flood Management** – creating habitats in-channel and within floodplains which 'slow the flow' of floodwater downstream. Society benefits if there are fewer or smaller floods, nature benefits because waterbodies are improved. Tackling the cause of the problem on land upstream gives better value for money than expensive remedies downstream in or near settlements.

Our **education programme** aims to get children outside and physically acquainted with our streams and rivers. The value of these visits in terms of physical and mental health of children, and the benefits they unlock in years to come, create savings for public services not just now but into the future.



*Lockdown crowds watching a Kingfisher on the Itchen in Southampton  
Photo credit: Tony Bunday*



# Help us Secure a Legacy

*Dave Rumble, CEO*

## Have you considered leaving a gift to Wessex Rivers Trust in your will?

Everything Wessex Rivers Trust does is about the long term, providing a better future for our rivers and for all the life that depends on them. In the same way that it takes decades for rainwater to permeate through chalk bedrock and into our streams, or for the children we educate to make a positive difference for rivers later in their lives, so too could your legacy be making a difference far into the future.

Please consider leaving a legacy for Wessex Rivers Trust in your will.

To discuss a legacy further, contact us:

[info@wessexrt.org.uk](mailto:info@wessexrt.org.uk)

07765850357



## In Other News...

### Neil Swift Joins the Team



Neil joined us, as a Project Officer, in September 2020. He started his career in the advertising industry but his love of fish and fishing lead Neil back to study at Sparsholt College where he gained a BSc in Aquaculture and Fishery Management. Neil has spent the

last seven years working as River Keeper at Mottisfont Abbey, on the river Test, where he was responsible for the management of the fishery, overseeing maintenance, alongside planning and delivering projects to improve the chalk stream habitats of the estate.

### Moragh Stirling Joins the Team

Moragh joined us in November after four years with the South East Rivers Trust where she hosted their local Catchment Partnerships. Previously Moragh worked as an oceanographer. Her passion for the natural world and sharing that enthusiasm with others led to her re-training at Cranfield and Reading Universities where the link between how we treat the land and the health of our rivers became the focus of her work.







**Wessex**  
Rivers Trust

Help us protect and restore the chalk streams  
and rivers of Wessex. Please visit our website  
[www.wessexrt.org.uk/becomeasupporter.html](http://www.wessexrt.org.uk/becomeasupporter.html)

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