ISSUE 7: JANUARY-JUNE 2018

THE WESSEX WATERWAY

The Wessex Chalk Stream & Rivers Trust's biannual newsletter

In this issue

CHAIRMAN'S INTRODUCTION

Dear Supporters,

We had a dry winter and by March WCSRT, not to mention Southern Water and other water companies in our region, were concerned about whether river levels would hold up this summer. As it happens, a very wet spring recharged the aquifers and despite the recent spell of beautiful summer weather, the Test and other rivers continue with quite good flows. We were lucky.

Water companies have been much in the news recently with significant criticism from Michael Gove, the Environment Secretary, and Ofwat. So it is a relief to find that Southern Water is committing in its plans for 2020 to 2025 to investment in new water sources (for example the Havant Thicket Reservoir in Portsmouth Water's area), a backup desalination plant and a programme of leak reduction in its pipes. These plans should help with abstraction from our rivers in dry years. Southern Water is also committing significant funds to environmental programmes in several of its catchments, including the Test. WCSRT will report in future newsletters on the development of these catchment initiatives.

I am delighted to introduce Dr Martijn Antheunisse as the new Director of WCSRT. I will not repeat what Martijn says in the next article but here is one anecdote. When Martijn came for interview he brought with him a copy of his doctoral thesis about floodplain rehabilitation that he had written for the University of Utrecht. He asked me whether I would like a copy of it, to which I replied that I could not read Dutch. Needless to say, Martijn had written it in English. How many of you could do that in any language other than your own? Anyway, it is a great pleasure to have Martijn working for WCSRT. He has made an energetic start, building on the sterling work carried out by his predecessor, Dr Paul Jose. There is no shortage of work for Martijn to do, and there are some large funding opportunities in the pipeline which we will try to access. Availability of finance remains the biggest constraint on the development of WCSRT. I am tremendously grateful to those of you who have helped us in the past – and encourage you, please, to do what you can to secure WCSRT's future.

George Seligman
Chair of Trustees

THE JOURNEY CONTINUES

At the time of writing, I have been in post as director of the Trust for three months. It has been amazing so far! In my previous role – Water Team Leader with Wiltshire Wildlife Trust – I had worked together with the Trust on multiple occasions, but I have come to realize there was – and is – still a lot to learn about our organisation. The breadth and width of the work is truly spectacular, I have already been involved in the finalisation of technical very complex fish pass works on the River Dun, sharing our passion for chalk streams with primary school students as part of the Winchester College outreach programme, water temperature monitoring, to the balancing act of working together with water companies to make genuine improvements to our water environment – not just greenwashing!

Earlier this year, DEFRA launched the Water Environment Grant scheme, which can pay for improvements to water quality as well as water dependent habitats. This is most likely one of the last schemes funded with EU-money, and we were keen to get our hands on some of it for our rivers. Staff worked almost round the clock in the final days before the deadline in May to put together a number of high quality bids. These included the creation of a bypass in the Nadder to improve fish migration, measures to tackle sediment issues in headwaters of the Nadder as well as on the Test & Itchen and river restoration works. We have also partnered up and helped others with the complex application process. By September we will find out whether we have been successful.

All water companies in our area have published their drought plans and water resource plans for the future in the last months for public consultation. We took an opportunity to scrutinise the plans by responding to the companies to point out where the ambition is too low and how the impact of abstraction on our chalk streams can be further reduced.

I feel privileged that I can continue the journey Paul Jose has set out for the Trust. With the right skills and capacity the Trust can play an important role in a number of exciting programmes, such as the Watercress & Winterbournes project on the Test & Itchen, Phase 2 of the River Avon Restoration Programme, Terretran – which will focus on phosphate and nitrate reduction in the Avon and mitigation and compensation work as part of Southern Water's changes in abstraction licences on the Test, Itchen and Candover. I look forward to meeting you one day on the banks of our cherished chalk streams.

Martijn Antheunisse

Research & Monitoring update

We use science to make sound environmental decisions.

NEED AN ECOLOGY OR FISHERIES SURVEY? THINK WCSRT

by Andy Blincow

Over the past year WCSRT has been developing the organisational capabilities in ecological and fisheries monitoring, through investment in equipment and staff training. In addition, the arrival of new staff members has brought in new skills and experience – strengthening and diversifying the technical expertise within the trust. The survey and monitoring of priority and protected species is an integral part of the trust's role, be it increasing the evidence base or ensuring that delivery of river restoration projects provides benefit for all aquatic and terrestrial species.

In spring 2018 WCSRT purchased electric fishing equipment to allow in-house fish survey. The Electrafish twin-annode 50m bankside equipment allows for fishing in a wide range of waters and conditions. Led by our Hampshire Avon Catchment Officer and keen angler Liam Reynolds, the trust has been undertaking monitoring of in-channel works delivered by the trust and partners and will continue to do so throughout the summer.

Having worked as a fisheries officer on the Isle of Man Liam is a highly competent lead surveyor, and our other staff members bring additional fisheries experience including major fish rescues and translocations using electrofishing and netting techniques.

Avon and Test & Itchen Catchment Officers Liam Reynolds and Andy Blincow, respectively, recently attended a freshwater macrophyte refresher course near Wareham, led by academics from University College London and Goldsmith Ecology.

With a combination of field visits to the River Frome, laboratory identification sessions and lectures, this has re-enforced the trusts ability to undertake macrophyte surveys and monitoring programmes. This may include WFD compliant 'LEAFPACS' survey and pre/post monitoring of capital delivery projects.

Liam recording information on fish caught at a recent electrofishing survey

Recently appointed Test and Itchen Catchment Officer Andy Blincow also brings a range of freshwater and terrestrial ecological species survey and mitigation experience, including water vole, white-clawed crayfish, bats, herpetofauna and invasive non-native species. With this experience and crayfish and bat protected species licences, this allows the trust to undertake habitat and protected species surveys in-house to inform restoration projects and to design and implement mitigation measures where necessary.

Jon collecting a freshwater macroinvertebrate sample on the Cheriton Mill Stream for the Watercress and Winterbournes HLF project

The trust's Scientific Officer Jon Bass brings many years of experience working for the Freshwater Biological Association, the Institute of Freshwater Ecology and latterly the Centre for Ecology and Hydrology. His key interest is in freshwater invertebrates and he is a national expert on blackflies (Simuliidae), an important chalk stream species. He is also an expert on the nutrient dynamics of chalk streams.

Capitalising upon this experience, Jon was appointed in June 2018 to devise an invertebrate monitoring programme for the Watercress and Winterbourne HLF project, including the professional sampling of perennial and winterbourne reaches and a catchment-wide volunteer monitoring programme.

In addition, WCSRT Education officer Vee Moore will shortly be attending a macroinvertebrate training course in Malham Tarn; further improving and consolidating skills within the trust.

As well as undertaking in-house works, WCSRT is able to provide fisheries and ecology surveys and mitigation to partners and landowners. All our surveys are carried out at the correct time of year, using methods that are right for the species and the area in question, and comply with guidance issued or endorsed by the relevant statutory nature conservation body.

Should you be in need of an ecology or fisheries survey, please do not hesitate to contact Catchment Officers Liam (avon@wcsrt.org.uk) or Andy (test.itchen@wcsrt.org.uk) who would be happy to provide advice or undertake a site visit to discuss.

Case Study: River Avon Backwater Fish Surveys

In June 2018 WCSRT undertook electrofishing monitoring of a trust's backwater project on the River Avon. Post-completion surveys of habitat improvement projects are essential in providing an indication of project success and, subsequently influencing the design of future projects.

One of the backwaters excavated on the Somerley Estate, Ringwood in late winter 2017 was surveyed to determine the use by coarse fish fry within the early phase of habitat establishment. Point Abundance Sampling Electrofishing (PASE) was used due to its effectiveness in generating quantitative estimates in shallow vegetated habitats.

Survey of the backwater returned circa 400 total fish, with a total of nine species: minnow, three-spined stickleback, gudgeon, dace, chub, perch, European eel, brook lamprey and stone loach. Surveyors also witnessed pike, carp and bream and expect to also find roach there in the future. The initial signs are very positive and the assemblage of fish is as expected, if not better for such a newly created backwater.

WCSRT is continuing to survey a number of newly created and more established backwaters within the Avon catchment and Liam Reynolds will later be analysing the data for inclusion within his UCL Masters thesis.

- *Our team electrofishing a backwater on the Hampshire Avon near Ringwood*

- *A pike, minnow and roach fry (top to bottom)*

Habitat Restoration update

We restore habitats for fish and wider biodiversity.

IMPROVING RECRUITMENT ON THE LOWER AVON

by Liam Reynolds

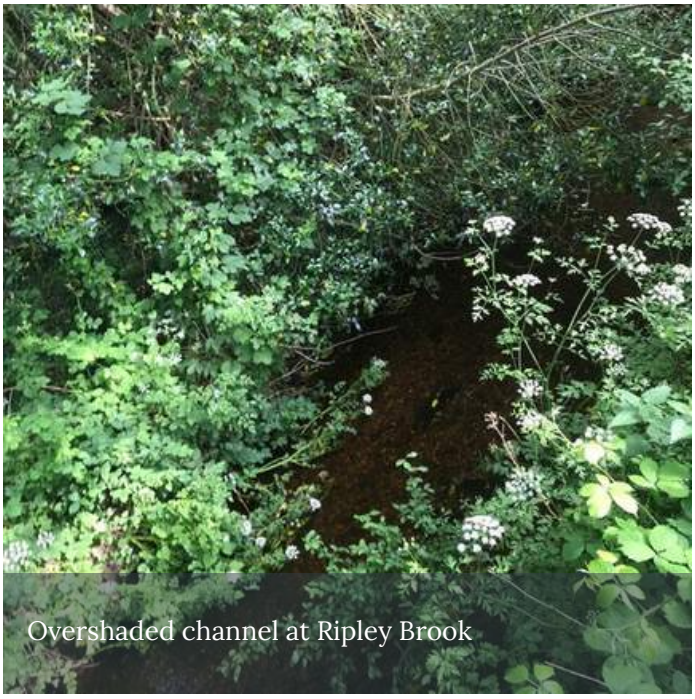
In summer 2018, WCSRT, in partnership with several landowners, NGOs and statutory partners, will be delivering three habitat improvement projects on the lower Avon.

The Hampshire Avon is the crown jewel in British Rivers, renowned for having the most diverse biological assemblage of all UK rivers. That said, there are significant pressures chipping away at the river's sustainability, as demonstrated by 68% of its waterbodies failing to exceed ecological thresholds. One observable example of the issue has been the collapse in Atlantic Salmon stocks in recent decades.

In order to help address these issues, WCSRT has been working at the catchment scale to improve water quality, quantity and habitat structure. Part of our holistic approach is the delivery of local restoration projects, particularly those that deliver multiple benefits and develop partnership working. The three projects planned for delivery this year are; Sopley backwater, Ripley Brook habitat improvement and Downton channel re-creation.

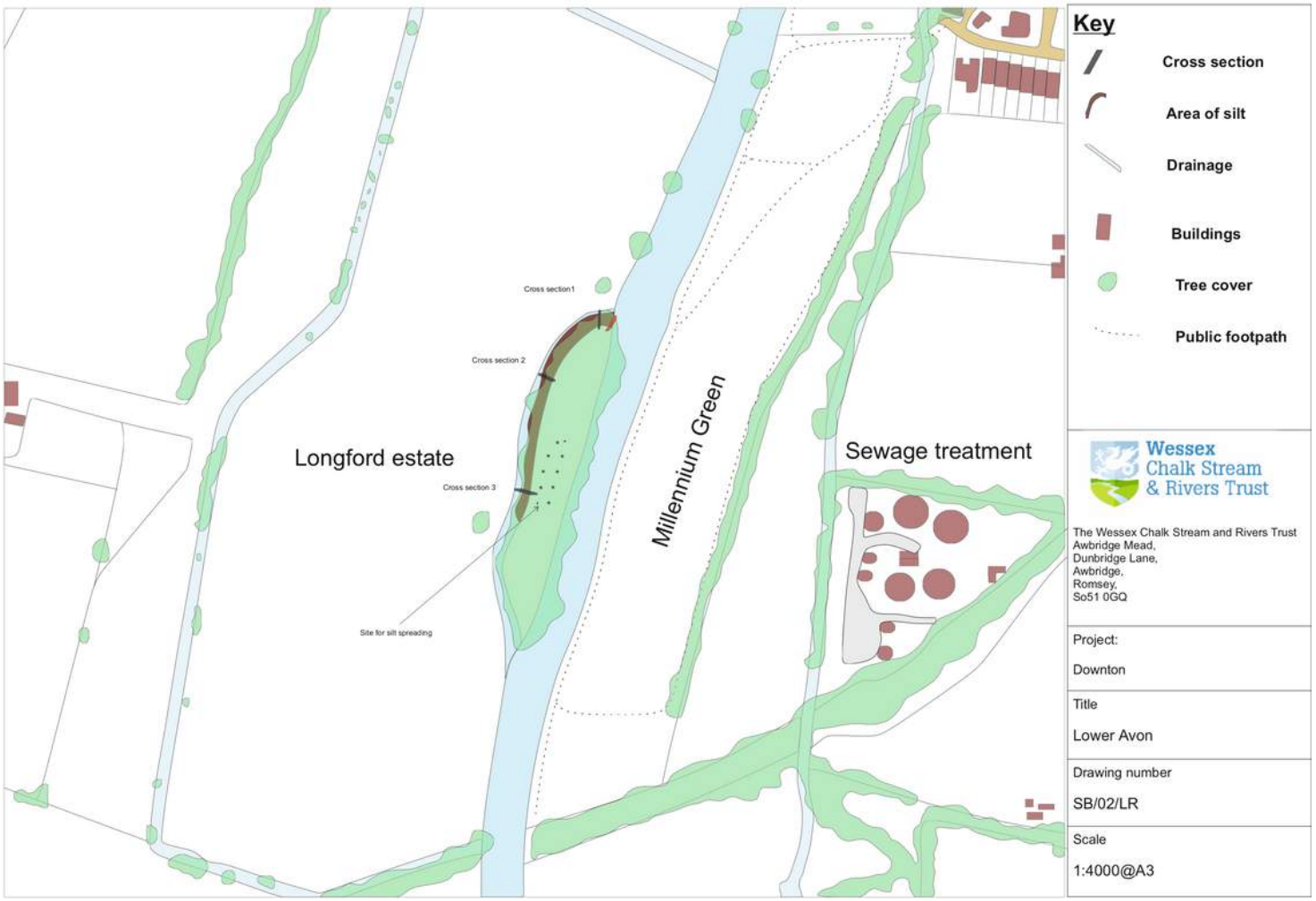
Sopley backwater is a partnership project between WCSRT, Avon Roach Project, Sopley Mill weddings, Christchurch Angling Club and the Environment Agency. The project has been developed to enhance recruitment and survivability of cyprinid fish within Sopley Mill race and will further improve lateral connectivity with the floodplain, reducing flood risk downstream.

Ripley Brook is a partnership project between WCSRT, Avon Tyrell estate, EA and Sopley Parish Council. The project aims to improve 0.5km of the brook below Ripley where the riverbed has become concreted due high acidity waters combined with a lack of sunlight. This combination has impeded in-channel development of both fauna and flora (see picture above right).



Overshaded channel at Ripley Brook

Vibrant green beards of starwort thriving where tree cover is lighter



As such, spawning potential within this stretch is largely limited and simple interventions will significantly improve spawning and recruitment successes. The interventions proposed are the installation of several woody deflectors and brash berms coupled with heavy sky lighting of the tree canopy.

Downton channel re-creation (see drawing above) is the largest of the three projects and involves the restoration of a secondary channel that once divided the island adjacent to Millennium Green, Downton. The 270m-long channel was permanently shut in the late 90s for reasons unknown, leading to significant sediment deposition during flood events. In response to historic actions the new landowner, with support from Longford Estate and the EA, has decided to reinstate the channel to its former glory.

If we backtrack just one generation, the habitat and fishery resource of the old channel are heavily documented. Local anglers recall the backwater running between 0.75 – 1.25m deep over golden gravels and between *Rununculus aquatilis* beds that teemed with fish and invertebrates.

Most notably, the channel was known as a fundamental winter refuge for juvenile course fish, which for context was/will be the only suitable habitat for over 1km in either direction.

In addition, we will be installing two wheelchair accessible fishing platforms for disabled fishermen and woman and days will be offered at no expense.

Many still water fisheries now offer wheelchair friendly fishing assess in the shape of purpose-built platforms. Similar resources are rarely found on riverine fisheries and the landowner and WCSRT would like to offer the opportunity for all anglers to fish on the Hampshire Avon.

If you would like to learn more about any of these projects, please contact Liam at avon@wcsrt.org.uk.

RIVER DUN PROJECT GETS FINISHING TOUCHES

by Martijn Antheunisse

At the time of writing, Five Rivers Environmental Contracting is tidying up the last bits of works left to do on the Larinier fish passes installed last autumn and winter on the river Dun in the catchment of the River Test at Holbury and Lockerly Mill. The fish passes are working well – fish have been seen using them!

To finish the work completely, we will reseed the sites and let them further recover this year. We have full faith that the fish passes work, but we would love to have the evidence to support that. This year and the next we will be undertaking electro fishing surveys to compare fish stocks upstream and downstream of the two fish passes. That will provide us with the ultimate answer whether there is exchange and what species are using the Larinier fish passes.

We are very grateful to the landowners who had to deal with muddy diggers, disturbance, and endless site visits. It has been an exciting journey and we hope it will galvanize other landowners and fisheries managers to work with us to further enhance our rivers and open up sections for migratory fish that are at present not accessible due to barriers.

Larinier fish pass at Lockerley Mill (February 2018)

Modified fish stew channel at Holbury (February 2018)

Water Environment Grant

The Water Environment Grant (WEG) is a new scheme developed under Defra, the Environment Agency, Natural England and the Rural Payments Agency to fund improvements to the water environment.

The proposed scheme, offering a total of £27 million over a three-year period, is designed to support delivery of projects that are currently funded through the Water Environment Improvement Fund (WEIF) and was open to wider range of applicants including charitable organisations and land managers.

The application window closed on the 11th May 2018 and WCSRT submitted three project proposals on the Test and Itchen and Avon catchments as lead partner, whilst providing assistance in submission to a number of additional projects.

Project proposals are being assessed nationally and if successful, applicants are expected to receive final confirmation in September 2018. Good luck to all other partner organisations who submitted bids!

Special Feature: Pewsey Downs Farmer Group

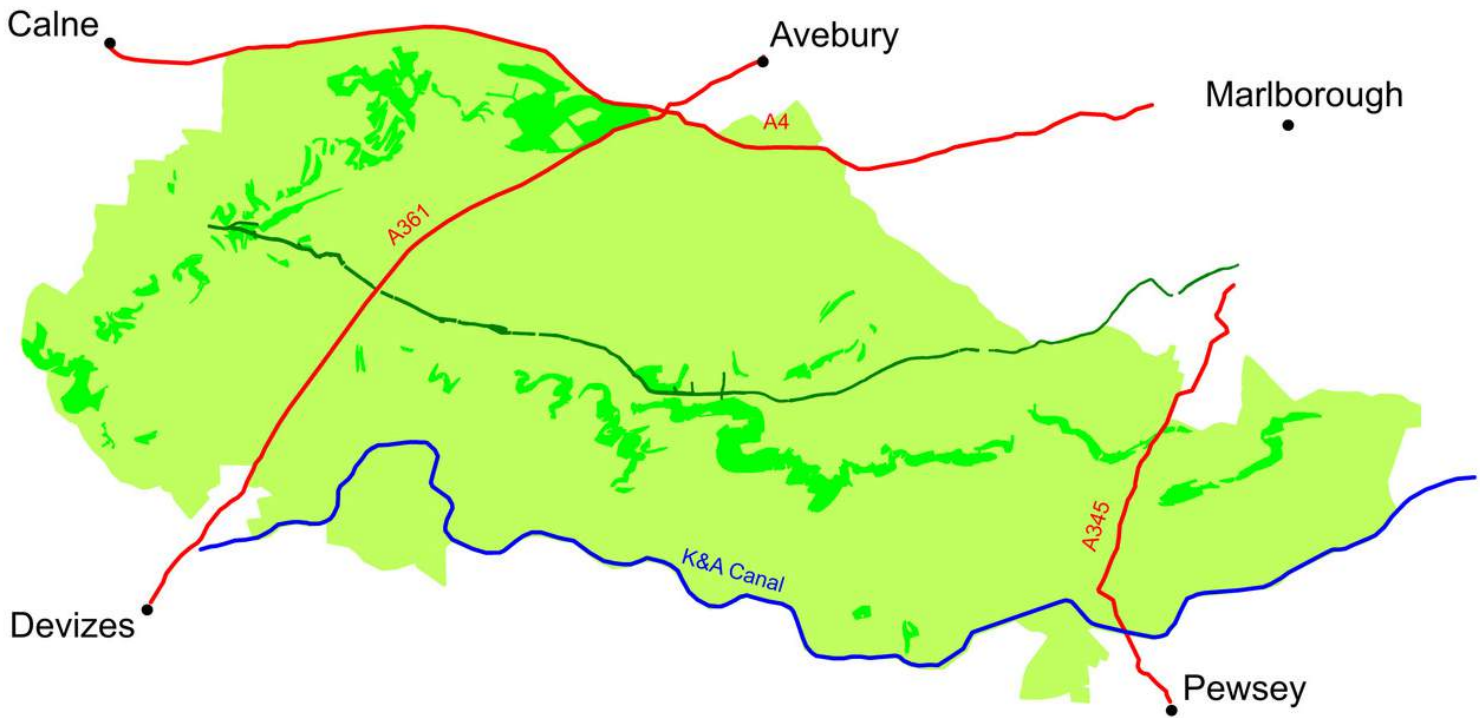
At our recent young farmer workshop on the upper Avon (page 15), Simon Smart who project manages the Pewsey Downs Farmer Group was one of the key speakers. Amongst other things, Simon talked about the group's role in reducing rural diffuse pollution on the River Avon. As this is a topic of interest for so many in our catchments, we invited him to write a piece about it for our newsletter.

The Pewsey Downs Farmer Group was formed in 2016 and now involves 20 farmers, covering over 8000ha on the chalk downland and Vale north of Devizes and Pewsey (see map below).

The group was set up following the desire of a number of farmers to work collaboratively to enhance the local landscape for wildlife. In the past, much of the conservation activities carried out on the Pewsey Downs focused on individual farms, with little consideration of what neighbouring farmers were doing (just as in many other parts of the country). By working together and looking beyond farm boundaries, we hope that our collective achievements will be greater than the sum of our parts. The group gives us a platform to share knowledge, experience and ideas. We have access to our own, locally specific, environmental advice and greater economies of scale, with easier access to environmental funding and buying power.

The basis for the group is that our objectives and activities have been developed by the farmers themselves (a bottom up approach), which we believe is a more effective, sustainable approach to deliver greater benefits for the Pewsey Downs landscape.

One of our main priorities is to reduce diffuse pollution into both groundwater and surface waters, namely the upper reaches of the River Avon in the Pewsey Vale. The members' farms contain several feeder springs, which form the beginnings of the River, and there is a particular ambition to reduce phosphates entering the watercourse. Rather than re-invent the wheel, the group is keen to work with existing delivery mechanisms and organisations with expertise such as the Wessex Chalk Streams & Rivers Trust and Catchment Sensitive Farming.



- ***Members attending a workshop on cover crops (top left)***
- ***Paula Sage, CSF Officer, talking to the Group about opportunities to improve yards and buildings to reduce dirty water contamination (bottom left)***
- ***One of the pill boxes which we are adapting to provide a valuable bat roost and hibernaculum (top right)***
- ***Some of our members planting a hedgerows to provide a corridor for bats linking a pill box with the Kennet & Avon Canal (bottom right)***

This has included training on the use of cover crops, which have multiple benefits for improved soil health and water quality, primarily, by soaking up nutrients and stabilising soils during the winter. We are also working with Paula Sage, from Catchment Sensitive Farming, to review farm infrastructure to improve dirty water and manure management (see picture above).

Furthermore, we are piloting Farmscoper, a software tool for providing guidance to farmers on the selection of measures to control sediments and nitrates to watercourses. We hope to use this to identify the most cost-effective ways to reduce phosphate inputs into the River Avon.

We are also very keen on the wildlife, which our watercourses support.

For example, we are working with the Wiltshire Bat Group to enhance our understanding of how bats use the landscape, particularly the wetland corridor provided by the Kennet and Avon Canal and up reaches of the River Avon. Excitingly, surveys carried out show that the area is extremely important for bats, including the rare lesser-horseshoe and Barbastelle bat. We have been busy improving habitat for these bats, including planting hedgerows and converting Second World War Pill Boxes as bat roosts and hibernaculum.

We are looking forward to continuing our group's work, in conjunction with the Wessex Chalk Streams & Rivers Trust, to have a positive impact on the water quality of the River Avon.

Catchment Management update

We help address wider water quality issues facing our catchments.

DIPPING OUR FEET IN WATERCRESS & WINTERBOURNES

by Andy Blincow

Development of the 'Watercress & Winterbournes' project, which is being led by the Hampshire & Isle of Wight Wildlife Trust and supported by WCSRT as a member of the Watercress and Winterbournes Landscape Partnership Board, is now in full swing.

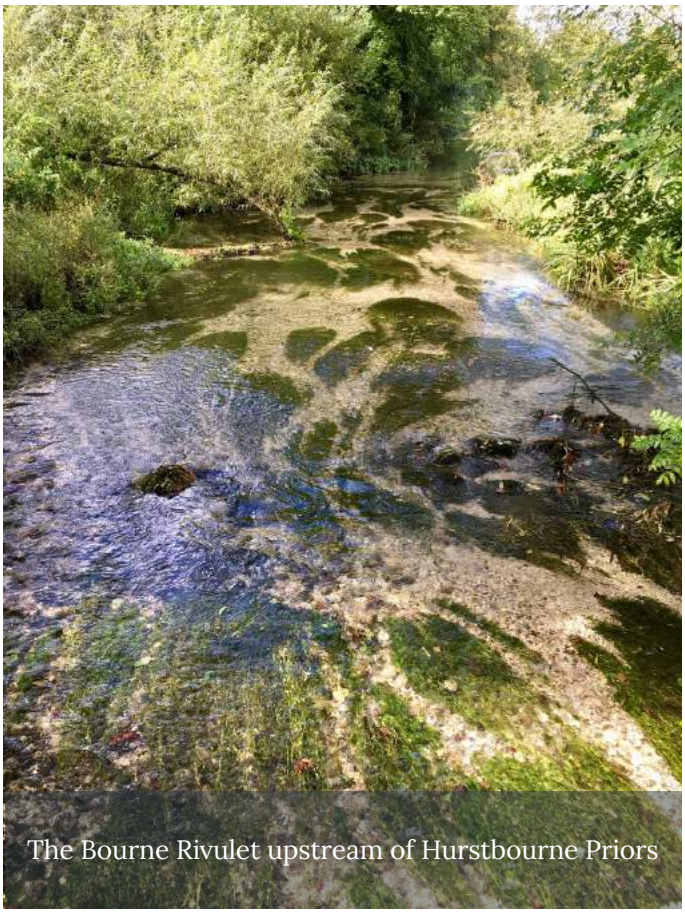
Heritage Lottery Fund support to develop a five-year Landscape Partnership Scheme focused on the headwaters of the Test and Itchen chalk rivers. Sixteen partnership organisations in this new project will work with seven communities on headwater streams – the Pillhill Brook, Upper Anton, Bourne Rivulet, Upper Test, Candover Brook, River Arle and Cheriton Stream - to develop and put in place plans to protect the rivers in the area.

The project aims to develop a community-focussed catchment approach, which will improve resilience, restore landscapes and build heritage structures, reverse species declines and reduce pollution. The project partnership, of which WCSRT is a founding member, will take action to sustain the unique headwater landscapes of the Test and Itchen for the benefit and enjoyment of future generations. Communities will develop the skills and expertise to be able to take the long-term lead in delivering their local catchment improvements.

WCSRT has continued to provide support and guidance on elements of the project, including input development of monitoring and education programmes. WCSRT recently invited Watercress and Winterbournes Community Catchments Officer Maggie Shelton to attend a Mayfly in the Classroom sessions run by our Education Officer Vee Moore, with a view to adopting a modified programme across the W&W catchments.

Led by our Scientific Officer Jon Bass, the WCSRT has been commissioned to develop and deliver the initial phase of the biological water quality monitoring programme for the W&W project.

Capitalising on Jon's vast experience of winterbourne invertebrate monitoring, the Trust has devised a volunteer-based sampling strategy covering the life of the project to 2024 for both perennial streams and winterbournes and designed a sampling strategy for the collection of professional baseline data. In addition, Jon and the Trust's Test and Itchen Catchment Officer Andy Blincow were appointed to collect the baseline summer invertebrate samples, which will have been completed by the time of publication.



The Bourne Rivulet upstream of Hurstbourne Priors

NEXT STEPS FOR RIVER AVON RESTORATION PROJECT

by Martijn Antheunisse

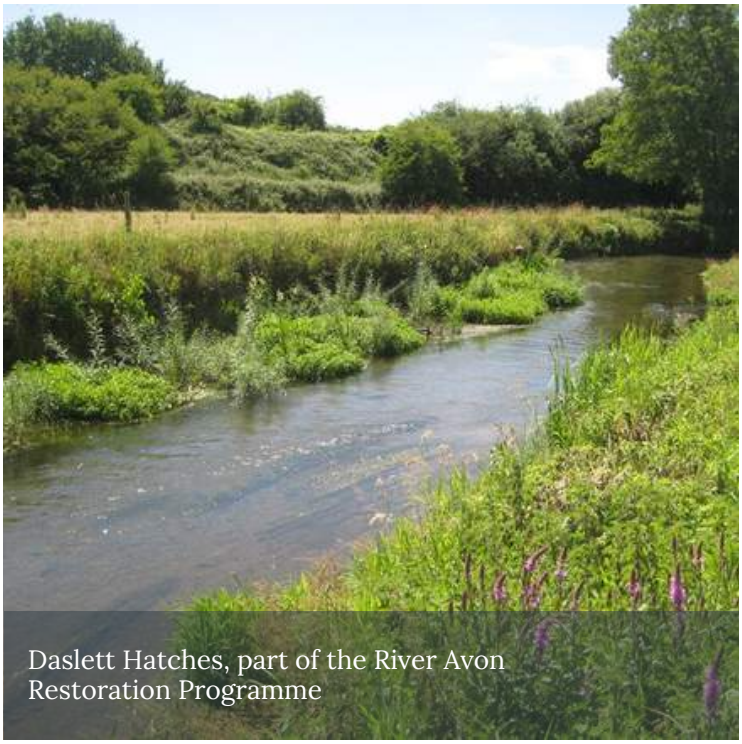
WCSRT, in collaboration with Wiltshire Wildlife Trust, is currently developing the next phase of the River Avon Restoration Project.

In March 2018, the first five years of restoring the River Avon came to an end. In 2013, the Environment Agency started with the delivery of this programme, soon joined by the Trust and many other partners in the Avon catchment. We have delivered a number of projects under the scheme – including work on the Till (2017), the Nadder (2015, 2016), many projects on the Lower Avon and the project at Wilsford cum Lake on the Upper Avon. All partners who together restored 45km of chalk stream received national recognition through winning the River Restoration Centre's 2017 UK River Prize.

River Avon - the winner of 2017 UK River Prize and Nigel Holmes Trophy

In January this year - together with Wiltshire Wildlife Trust - we took on the job to investigate the possibilities and formulate a delivery plan for the next five years. A contribution from the Environment Agency to hire a specialist consultant as well as technical input from a number of partners made it possible for us to pull together a comprehensive plan. In this five year plan, we are not shunning complex and difficult projects in the next five years: full scale remeandering of the Avon, floodplain connection and removal of key fish migration barriers are on the list.

Delivery of the programme as a whole would restore 30km of the River Avon and its tributaries to more natural conditions. The cost to develop and deliver the projects required is an estimated £3,000,000. The next step will be to secure funding to deliver this ambitious programme. It is unlikely government will also fund this phase of the restoration plan, therefore we are investigating alternative funding sources and mechanisms to pay for these investments to further improve our iconic chalk streams.


Daslett Hatches, part of the River Avon Restoration Programme

If you would like to know more about the River Avon Restoration Project, please contact Martijn or visit the WCSRT website for additional information: www.wcsrt.org.uk/river-restoration.

Education update

We engage with schools and communities to raise public awareness of chalk streams.

REVITALISING THE MONKS BROOK

by Vee Moore

A plethora of items ranging from shopping trolleys to golf balls were found and removed by volunteers taking part in a river clean-up in Eastleigh, Hampshire on Sunday 27th May 2018.

Organised and led by WCSRT, the river clean-up took place on a small tributary of the Monks Brook running along the southern boundary of Fleming Park in Eastleigh. An enthusiastic and extremely hard-working group of students from Southampton University (the Southampton University Conservation Volunteers) braved the heat and humidity to remove 14 bags of (mostly plastic) waste, four shopping trolleys, a child's bike and other miscellanea from the stream channel and its banks.

What's the problem with litter?

Litter enters a river or stream in a number of ways. Surface water drains collect rainwater from our neighbourhoods, car parks and other public areas. This water is not treated before it reaches our local river therefore plastic bags, bottles or cigarette butts that end up in a surface water drain are washed directly into our streams and rivers.

In addition to posing a health risk to the wildlife (via entanglement and ingestion), litter decreases oxygen levels in the water when it decays and hence reduces the overall water quality and biodiversity of the river.

How can you help keep our rivers clean?

Please dispose of waste carefully. Carry a bag for waste along in the car to eliminate the temptation to throw it out the window. Put litter in your pocket until you find a recycling container or waste bin.
Recycle and reuse items whenever possible.
Make sure your waste bins have lids that can be securely attached. Do not put out open containers or boxes filled with debris.
Join a clean-up event. Many volunteer groups host such events. One opportunity is WCSRT's clean-up day held each spring.

Meet our Litter Heroes

Upper Itchen Habitat Workshop

Replicating the success of the 2016 habitat workshop run in partnership with The Wild Trout Trust and Test & Itchen Association, WCSRT are planning to hold a repeat event in autumn 2018 on the Upper Itchen. If you are interested and would like to be kept informed of further details, please email admin@wcsrt.org.uk.

WILTSHIRE YOUNG FARMERS TEST WATER QUALITY

by Vee Moore

On Friday 18th May 2018, WCSRT, in partnership with Frontier Agriculture, held a young farmer workshop focusing on rural diffuse pollution. Around 30 Wiltshire-based young farmers and their families attended the event at the picturesque Manningford Trout Fishery near Pewsey, Wiltshire.

The evening began with a series of brief presentations about the impacts of rural diffuse pollution, the mitigations methods adopted in the Hampshire Avon catchment and the win-wins of implementing best practice. The young farmers also learnt about the work of organisations involved in rural diffuse pollution mitigation (e.g. Natural England's Catchment Sensitive Farming scheme and the Pewsey Downs Farmers' Group) and the support available to farmers and land managers to help them implement best practice.

During the hands-on part of the workshop, the young farmers worked in small groups to test water quality for a number of parameters, namely turbidity, nitrates and phosphates, and were encouraged to interpret and discuss results in relation to factors affecting the river and its surrounding catchment. They were also able to examine the freshwater invertebrate community of a short stretch of the Avon at Manningford and make an assessment of water quality based on the (riverfly) families found.

What is rural diffuse pollution and why is it a problem?
Often driven by rainfall and how we manage land, diffuse pollution occurs when nutrients, pesticides, faecal bacteria, chemicals and fine sediments are lost from the land into local streams, rivers, lakes, ponds and groundwater. Diffuse pollution often comes from a range of sources hence the effect is cumulative. Therefore small amounts of runoff from one field, when added to all the other sources that also feed into a local stream or river, can have a big overall impact on water quality. However, it is not just an issue at a local level. The effects of diffuse pollution on water quality can often be seen miles away from the source, for example beaches designated as 'bathing waters' can be affected by runoff coming from further up the catchment.

Farmers testing their water samples with nitrate and phosphate quick kits

Results are recorded and submitted to the Clean Water for Wildlife survey

Why take action?
Reducing diffuse pollution risk doesn't just benefit water quality and the environment; it can also help to improve farm business efficiency, profitability and can lower a farm's carbon footprint.

Three key ways to tackle rural diffuse pollution:

- Reduce the source of the pollution – where is it coming from? Can the pollution source be minimised?
- Block the pathway – assess how the pollution source is getting from the source to the problem site.
- Prevent it getting to areas where it will become a problem – divert or collect the pollution before it reaches the watercourse.

MAYFLY IN THE CLASSROOM IS NOW IN WESSEX

by Vee Moore

Three primary schools in the Test & Itchen catchment have participated in our *Mayfly in the Classroom* pilot during the summer term.

The programme, run by WCSRT in partnership with the Wild Trout Trust, aims to connect school children to their local river habitats and uses the lifecycle of mayflies to teach them about the broader themes of biodiversity, ecology and the links between aquatic and terrestrial biodiversity. Children catch mayfly nymphs from their local river, build their own hatchery out of old plastic lemonade bottles and then release adult mayflies back to the river.

Mayfly in the Classroom is both cheap and easy to set up and a variety of activities can be run alongside it to make the experience as hands on and interactive as possible. WCSRT provides all of the equipment and supports the schools involved with mayfly sampling and hatchery setup. The programme runs in the summer term for a fortnight. It's suitable for all ages.

Our Education Officer, Vee Moore is now taking bookings for next year. Please drop her an email at education@wcsrt.org.uk if you have any questions or if you'd like your school involved.

Making friends with a recently-hatched mayfly

Children sorting freshwater invertebrates on the bank of the River Itchen

Inspiring the next generation about chalk streams

WCSRT's long-term collaboration with Winchester College aims to provide Winchester-based primary schools with an opportunity to learn about their local chalk stream, the River Itchen and the abundant wildlife that inhabits its in-channel and riparian habitats.

Over 200 Year 5 pupils from four primary schools took part in the programme during the spring and summer terms and we're now looking forward to welcoming back a fresh cohort of primary schools pupils after the summer break.

The *Story of Chalk Streams* lesson has also been very popular since its launch in late autumn 2017. It is WCSRT's flagship chalk stream education programme, which combines science, geography, maths and art to get children enthused about their local stream or river. Over 250 children from five primary schools across the Wessex region have so far taken part this lesson.

If you know of a school that would like to participate in either of these learning opportunities, please email our Education Officer, Vee Moore at education@wcsrt.org.uk.

In Other News

Goodbye and welcome - WCSRT Trustees
At the last trustee's meeting in June, George Seligman announced that Bob Wellard would be stepping down from WCSRT's board of trustees. Bob has been a trustee for the last three years and has given a lot of his time to help and advise both the Board and WCSRT staff. We wish Bob well with his future endeavours for Wiltshire Fisheries Association and the Piscatorial Society.

WCSRT has recently appointed two new trustees: Hallam Mills and Dr Dave Watson.

Hallam spent 30 years in the energy industry, most recently as a marketer in Shell. He now farms in the lower Avon Valley, at Bisterne and Winkton. He is also a founder member of ASRA, the Avon and Stour Riparian Owners' Association.

Dave spent 33 years with IBM research and development, in technical, management and executive roles. He was awarded a CBE in 2017 for services to Engineering and Science research. Throughout his life he has maintained a keen interest in the geomorphology and hydrology of watercourses. He is passionate about the need to encourage good practice in catchment management. WCSRT warmly welcomes them both onto the board.

GDPR and data protection
After taking advice from the Rivers Trust and similar organisations we believe WCSRT is fully compliant with the new GDPR regulations. Please see the new data protection policy on the website: www.wcsrt.org.uk.

All supporters have been contacted and the website has been updated so that supporters have to 'opt in' to receive emails from us. Please contact Lee Bush – WCSRT's administrator - with any queries.

WCSRT Annual Fishing Sale - 2018
This year's sale of donated fishing days has been very successful raising over £6,000. We were lucky enough to receive some very generous donations of days this year - many on stretches of river, which could not normally be accessed by the public. Many thanks to those of you who have given fishing to us. Details of the remaining four fishing days can be found on the WCSRT website: www.wcsrt.org.uk/fishing-sale.

If you would like to donate a day or two's fishing to WCSRT to sell in 2019 it would be greatly appreciated and will help WCSRT continue to carry out the important work on the chalk streams in the Wessex region. Please email Lee Bush at admin@wcsrt.org.uk with details of the fishing days you are happy to donate. Thank you for supporting us.

River Dun dinner
You may know that during the autumn and winter WCSRT supervised a major project at Holbury and Lockerley Mills on the River Dun, which means that the whole of the River Dun up to and above Holbury Mill is now accessible to migratory fish. This is a significant enhancement of the river's environmental status.

In early May our chair, George Seligman invited a number of Dun landowners for a dinner at his home in Hampshire so WCSRT could explain about the projects as well as the wider work of the Trust. This was a great success and many landowners indicated they would be keen to be involved in other projects in the future.

Become a supporter today!

Help us protect and restore the chalk streams and rivers of Wessex. Please complete the supporter's form or download it from our website:

wcsrt.org.uk/ways-to-give

Wessex Chalk Stream & Rivers Trust

Registered charity no: 1130991
Registered company no: 06822819

Registered office: Awbridge Mead, Dunbridge Lane, Awbridge, Romsey SO51 0GQ