

2018-19

Living Rivers newsletter



Herts and
Middlesex

NEWS ON YOUR LOCAL RIVERS IN HERTS & MIDDLESEX



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Introduction

Welcome to the 2018/19 Living Rivers newsletter – an update on action along our county's rivers from Herts and Middlesex Wildlife Trust.

Since 2012, the Trust, in partnership with the Environment Agency, has been leading on landscape-scale conservation of Hertfordshire's chalk river valleys, one of the rarest environments in the world. There are only 200 chalk rivers globally and 85% are in England.

Our Living Rivers project raises awareness of these fragile habitats and their wildlife. We co-ordinate restoration activities to bring the rivers and their floodplain back to good health, working in partnership with landowners, community groups, local authorities and statutory bodies.



Creating Wildlife Corridors on the River Lea

This year, we teamed up with the Wild Trout Trust to improve river habitat along the River Lea in Wheathampstead for the benefit of wildlife and the local community.

Historic alterations, like dredging and building weirs, have left the River Lea suffering in places from being overly wide and straight, silted-up and with minimal plant cover along its margins. These stretches hold little value for wildlife which needs a variety of in-channel habitats to thrive.

Over three days in spring 2019, a team of 15 volunteers learnt how to recreate natural habitat in a damaged section of river. They built a series of brushwood ledges, made of coir rolls and wood coppiced from the Trust's nature reserves, and planted these up with colourful native aquatic plants.

The ledges provide new feeding, sheltering and breeding areas for wildlife in and around the river as well as adding extra value for nearby residents who treasure watching wildlife from their riverside properties.

The idea was suggested at a Catchment Partnership meeting by residents of King Edward Place. Guy Morton-Smith, Chair of King Edward Place Residents Association said: "The residents here are incredibly happy that Herts and Middlesex Wildlife Trust has kindly managed the whole project for us. We are very grateful for the hard work of the team of staff

and volunteers and so will be the local wildlife for many years to come!"

This project was funded through an enforcement undertaking and is part of a wider catchment restoration plan to enhance two kilometres of the River Lea between Harpenden and Wheathampstead.



Volunteers creating wildlife corridors

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Looking after Lemsford's Chalk Lagoons

The Trust's Lemsford Springs Nature Reserve on the River Lea supports a mosaic of chalk water lagoons fed by artesian springs.

This former watercress bed is a nationally important habitat and home to a range of freshwater wildlife including rare

wading birds like green sandpipers which feed on invertebrates and small fish living in the shallow wetlands.



Lemsford's chalk lagoons

© JOSH KUBALE

The health of the lagoons depends on the quality of the water that feeds them. The River Lea flows alongside them and although a chalk river, its water quality is lower with about 80% being treated household wastewater emanating from the East Hyde sewage treatment plant. As the banks naturally erode, there is a risk that river water will seep into the spring-fed lagoons and lower their quality.

In winter 2018, the Living Rivers Officer worked with the Trust's Reserves Team and volunteers to install flow deflectors and 50 metres of willow spiling to help reduce bank erosion and prevent the River Lea from inundating the lagoons, to keep them in pristine chalk stream condition.



Keeping Kingfishers Nesting on the Stort

Living River Champion Bob Reed has been volunteering for many years to improve the Stort Valley for wildlife.

The River Stort has been altered over many decades for industry, leisure and flood relief, resulting in long stretches that are artificially modified and heavily used by boats. Nonetheless, it is still a haven for wildlife with the River Stort, Navigation and its many smaller brooks, connecting up the largest area of intact floodplain and wetland habitats in Hertfordshire.

Since 2018, Bob has been championing a project to create a nest site for kingfishers in a man-made flood relief structure, clad with sheet piling.

and, with help from the Environment Agency and the Trust, installed the first artificial kingfisher box in February 2019. A dash of white paint outside the nest hole added the final touch - mimicking kingfisher droppings so nosy neighbours might take a look. This will hopefully entice one to nest in the next breeding season and Bob will be monitoring to keep a close watch on how successful the box is.

It just goes to show, spaces for wildlife can be created in the most unlikely of places! With thanks to the EA for support with this project.



Spiling Support for Local Landowners

Living River Champion Patrick McNeill has been lending a helping hand to landowners along the River Lea.

Since 2018, Patrick has been perfecting his willow spiling skills to help protect the banks of the River Lea from undesirable erosion between Batford and Wheathampstead.

Spiling is a traditional technique used to reinforce riverbanks. Live willow poles are woven into a lattice and their roots encouraged to grow into the banks to help stabilise them.

Although erosion and deposition are natural river processes, it can

be exacerbated due to man-made modifications to the river or by trampling from people and dogs. This over-widens the river, slows down the flow and mobilises extra silt which can smother chalk river gravels which provide valuable habitat for spawning fish.

Last year, Patrick inspired a partnership project between the Trust, Wheathampstead Parish Council, the Environment Agency and the

Verulam Angling Club. Willow spiling was introduced along 80 metres of riverbank through The Meads. This open space is a fantastic place for people to get close to wildlife, but as a consequence, the river suffers from disturbance and bank erosion. Over 20 people learnt skills in river restoration and committed 270 hours to make the project a huge success. Patrick has gone on to install willow spiling for other local landowners – taking his total up to 100m of river enhanced!





Barbel

River Lea Barbel Task Force

The Lea Barbel Task Force is three years into a project to reestablish a thriving barbel population in the lower River Lea.

The project is a partnership between the Trust, Lee Valley Regional Park Authority (LVRPA), the Environment Agency (EA), Kings Weir Fishery and Fishers Green Angling Consortium.

It originally came about because angling groups noticed a shortage of small fish in the River Lea through Lee Valley Regional Park, from Kings Weir downstream through Fishers Green. The lack of spawning success by Barbel and resulting low numbers of juvenile fish was considered to be caused by a gradual decline in the quality of the river's instream habitats. Low water levels coupled with an over-wide channel have caused flows to slow down and silt to build up. This

smothers the gravel spawning beds and suffocates the eggs, meaning many do not hatch into the fry stage.

The Lea Barbel Task Force has formed a restoration plan to bring about long-term improvements to the river and increase Barbel spawning success. It involves narrowing the river to increase flow velocity, to naturally wash away silt and keep the gravels clean for fish to use. To do this, brush-wood berms are being introduced as well as large woody habitat – sections of tree trunk and branches. Over time, these will strain a lot of silt from the river as well as creating new areas for fry and invertebrates to shelter and feed in. Spiling is also being installed along the riverbank to protect

it from excess erosion and reduce silt being mobilised into the channel. As a temporary measure, the gravel beds are being cleaned using high power jets to rid them of silt and clay which compacts them. Along with introducing fresh gravels, it's intended that the new river features will work to keep the gravel beds clean in the future.

The implementation of the plan is being coordinated by LVRPA who own the river and the first phase was completed in summer 2018 at Fishers Green. Thanks to the EA, Barbel Society and Fishers Green Angling Consortium for funding, the second phase of the project is due to begin on-site in autumn 2019 led by specialist contractor Aquamaintain.



Conserving Slimy Wrigglers

For three years, we have been working in partnership with the Environment Agency to conserve one of the world's most threatened (and elusive!) species: the European eel.

Relatively little is known about these fascinating creatures which can live up to 25 years in our rivers before making an incredible 6,000 km journey to the Sargasso Sea (near the West Indies) where it is thought that they spawn and complete their lifecycle. They are a critical part of river and wetland food chains – their high fat content making them a delicacy for grey herons, bitterns and otters – and once made up 50% of fish biomass in UK freshwaters.

Sadly, eels are now classed as critically endangered by the International Union for Conservation of Nature. Data suggests they are at a greater risk of extinction than some of the world's more well-known wildlife like the blue whale, giant panda and mountain gorilla.

Our project aims to help eels thrive again in Hertfordshire's rivers and wetlands. By removing barriers to migration and connecting up complex habitats, eels are being encouraged to move up the River Lea from the Thames

through the Lea Valley and access different environments which they need for maturing before they make their final journey back to spawn in the Sargasso Sea.

The first major barrier to eel migration, a weir on the south side of Holyfield Lake, was adapted in 2016 using two technical eel passes. In early 2019, work continued upstream and tackled a barrier on the north side of Holyfield Lake. By notching a weir on a side-ditch that bypasses an impassable flood relief structure, eels can now reach the next wetland complex, Nazeing Meads. Fish surveys on the ditch are being carried out by the Environment Agency to understand how many eels are using the new route. So far, around five kilometres of river and wetland habitat have been opened up for eels and other fish. The next phase began in spring 2019 and aims to tackle the next barrier, a flood relief gate on Dobb's Weir Road, near an aptly named pub – "The Fish & Eels".



Before



After



European eel



Catchment Partnerships

The Trust has hosted the River Lea Catchment Partnership since 2012, funded and supported by the Environment Agency. We support eight catchment groups involving 150+ members and facilitate collaborative working to improve our chalk rivers – aiming to bring them to “Good Ecological Status”, as set out in the Water Framework Directive.

This year, we have:

Hosted

10

catchment partnership meetings.

Organised the River Lea Catchment Conference attended by

70

people.

Supported development of

3

new groups on the rivers Rib, Mimram and Hiz.

Engaged

11

new organisations in the catchment partnerships.



Partnership working in the Beane Valley

© PETER WHITE

Living Rivers Roundup 2018/19

PROJECTS

1 pond restored

2 wildlife havens created

5 new restoration plans

6.5 km river channel enhanced

120 km length of river advised and influenced

20,000 m² improved wetland habitat

ENGAGEMENT

1 conference

2 talks

7 events

350 people engaged

VOLUNTEERING & TRAINING

30 active riverfly monitors

30 new volunteers trained

600 volunteer hours committed



Herts and Middlesex

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River Lea Catchment Partnership

