Action for the River Kennet

SPRING 2019 40

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River talk

A PARTNERSHIP OF PEOPLE WHO CARE ABOUT THE KENNET

Lambourn dredging incident

Our winterbournes are fragile assets that deserve better than this.

In December, approximately 80m of the bed of the River Lambourn at East Garston was dug up using an excavator. The River Lambourn is a winterbourne and the whole river is designated a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC), giving it the highest level of legal environmental protection.

The Environment Agency responded to reports of illegal activity and instructed the operators to stop. Shockingly they resumed the following day and were filmed by our farm advisor.

The damage is not limited to these 80m but also threatens the stretch of the river downstream from the dredging. When the stream starts to flow again the loose, muddy bed and banks will wash downstream to clog the clear gravel beds below.

We are expecting the Environment Agency to prosecute.

Charlotte Hitchmough

What to do if you spot a pollution incident on the river...

Pollution in the river should be reported to both the Environment Agency and Thames Water. If you are sure that something is wrong, be firm and ask for a reference number.

The Environment Agency (0800 807060) will ask questions to assess the incident impacts and may attend – note the NIRS reference number.

Thames Water (0800 316 980) will respond in person within two hours if they suspect that pollution is coming from one of their assets. Please select option 2.

If you are a Riverfly Monitor and you have a 'trigger level' breach (a score of below 5) follow the Riverfly protocol:

- Re-sample (this eliminates the chance of a rogue sample)
- If the score is again below the trigger level call Anna Forbes (ARK Riverfly Co-ordinator) immediately on 07780381709. She will report the incident and liaise directly with our EA Riverfly Contact.

News from the Chairman

New laws for a healthier landscape.

Seventy years ago the National Parks and Access to the Countryside Act received Royal Assent. The Act provided the framework for the creation of National Parks and Areas of Outstanding Natural Beauty in England and Wales and other mechanisms to conserve natural beauty. It also allowed for the recording, maintenance and creation of public rights of way. It received cross-party support as part of the post-war reconstruction of Britain. Three years after the National Health Service Act the British government was legislating to protect our beautiful countryside and formalising how the public should gain access to it.

It was this act that led directly to the rights of way network that we all use to explore the beautiful Kennet Valley and the Area of Outstanding Natural Beauty through which the River Kennet flows.

Today, new pieces of legislation are passing through parliament that may, in their own way, turn out to be equally momentous. Firstly, an Agriculture Bill will insist that farmers and other land managers must only be paid public money where they provide 'public goods'. As we depart from the Common Agriculture Policy there will be a move away from paying subsidies for production and towards payments for positive environmental management. This significant change will hopefully lead to land management that is properly sustainable – a healthier environment underpinning a healthier society and a stronger economy.

The mechanism for paying land managers to work the land in a more environmentally positive way will be known as the Environmental Land Management System (ELMS) and the government is currently working with farmers to design, develop and trial the new approach. ELMS will be rolled-out from next year.

I hope this means that ARK can in the future work even more closely with farmers and other land managers to realise our aspiration for the River Kennet.

The other piece of legislation is a new Environment Bill. It is over 20 years since there was an act of parliament dedicated to the environment. This bill is at an earlier stage in its development than the Agriculture Bill but its main purpose will be to maintain environmental standards as the UK leaves the EU. It thus seeks to build on the vision of the 25 Year Environment Plan published last year, when the Prime Minister pledged to 'leave the environment in a better state than we found it'. Once passed by parliament it will turn that policy aspiration into a statutory requirement enforced by a new regulator called the Office for Environmental Protection (new acronym alert: OEP).

Of even greater interest to ARK will be the bill's insistence on better management of our surface, ground and waste water. If we use the 25 Year Environment Plan as a guide to what might be in the Environment Bill we can not only hope to see measures to reduce abstraction but also opportunities to connect the Kennet with its flood plain thus creating more wetlands. ARK will keep a close eye on what emerges.

Before I finish, I should remind you that, even though it is the Chinese year of the pig, in England it is definitely a Yoga year. No, not the body-bending spirit-reaffirming contortion kind, but the Year of Green Action – YOGA (# Year of Green Action and # I Will). So, to all ARK volunteers get out and do some Yoga on the River Kennet – and thank you for all your efforts.

Richard Clarke

Membership

A gentle reminder that membership renewals are due on 1 April, £20 for an individual or £30 for a family membership. For more details please contact **linda@riverkennet.org**

Wonderful Winterbournes

The powerhouse of our chalkstreams.

A defining characteristic of chalk streams is the winterbourne section – the part of the river that only flows when groundwater is high. On the Kennet they reach all the way across the Marlborough Downs to Avebury, Winterbourne Bassett and beyond. The upper reaches of the Kennet's tributaries including the Lambourn and the Og are classic winterbournes and their place names reflect the ephemeral pattern of flow (eg Lambourn – from 'lamb' and 'bourne', because the river mainly flows in the Spring during lambing season). Although the cycle is predictable there is natural variability; in a dry year some winterbourne sections might not flow at all, and in a wet year they may flow almost all year round.

Dry winterbournes look more like a path or a track than a river, but don't be deceived; they are a hive of ecological activity and are some of the most biodiverse zones in our river system. Research shows that parts of the river which flow intermittently have a greater biodiversity than constantly flowing reaches. Even the 'scum' on the bottom of a dry river is a diverse algal community.

The winterbournes naturally transition between flowing, pool and dry states, creating aquatic–terrestrial habitat mosaics that change in space and time. They support a diversity of species depending on how much water is present – effectively treating the river as a 'time-share'. For example during the pool phase specialists like caddisfly larvae, usually restricted to floodplain ponds, move into the temporary pools in the river. As those pools dry up mud beetles arrive to graze on the rotting algal material left behind. Brown Trout have adapted to swim to the upper reaches of the winterbournes during high winter flows, where they can find clean gravel and less competition for spawning sites.

As the waters recede during the summer, the adults and newly hatched juveniles move downstream.

Other species have adapted to living in the same part of the river regardless of the state of flow. For instance, some specialist stonefly and mayfly nymphs are only found in the winterbournes and some beetles have evolved to inhabit river sediments which experience repeated inundation.

There is a clear succession of plant communities growing in these 'sometimes wet' rivers. Terrestrial grass gives way to marsh foxtail, followed by rapidly growing annuals like water speedwell and watercress, until the perennial river begins and different plant communities, dominated by stream water crowfoot and starwort, take over. The terrestrial plants and herbs that dominate the river in its dry phase provide habitat for pollinating insects, enhancing the productivity of nearby arable land.

The winterbournes are the powerhouse of our chalkstreams. The moment they start to flow water species colonise and drift downstream to supply the whole river system with new organisms; the moment they dry they become an entirely new habitat. They are an essential part of the landscape we live in, so let's cherish those dry stream beds and treat them with the respect they deserve.

Charlotte Hitchmough

Volunteering

Whether it is a public or private stretch of river, our volunteers play a vital role.

As well as enabling us to deliver practical river restoration to a high standard but at a reduced cost, they help us with engaging and expanding the knowledge of the community.

All our volunteering tasks are professionally led; we get local people into waders and they learn what we are doing, how to do it and why – and then they 'get it' and are rewarded by having played a part in the transformation (which is often very quick).

We currently have 170+ volunteers on our database, from teenagers working for their Duke of Edinburgh awards to retired people in their 80s, and all the decades in between. There's often more than one task on offer every week (including Saturdays), and they are at different locations within the Kennet Catchment.

To be an ARK volunteer you don't need any experience – we help you develop the necessary skills from day one. As a Rivers Trust we are in the river a lot but if you prefer dry land there are plenty of tasks that don't involve getting wet, from our Yellow Fish awareness-raising campaign to making faggots or packing our newsletters.

Monitoring is another important aspect of what we do and where volunteers are key. Our riverfly hub is one of the most successful and established in the UK, with 62 active sites on the Kennet and its tributaries regularly monitored for pollution by trained volunteers.

Over winter we have a team of trained ARK Redd Spotters – volunteers who walk the riverbank during the brown trout spawning season and log down the trout nests. And this summer we will once again be targeting the non-native plant Himayalan balsam – the more volunteers helping to remove this invasive species (see the article on page 5) the better.

We welcome fair-weather volunteers, weekly volunteers, those who we might see just a few times a year. The joy of being a volunteer is you choose what you want to volunteer for, for how long and how often!

Each year the thousands of hours given freely by our volunteers is amazing and indispensable! We have another busy year upon us so if you fancy learning new skills, meeting like-minded people and helping your rivers and surrounding habitats email anna@riverkennet.org, martin.kent@riverkennet.org or visit our website www.riverkennet.org and look at Events and Join In.

Anna Forbes

> *"As relatively new residents in Froxfield, Steve and I feel privileged to be involved in helping to restore the water meadow. Even though it was cold and damp, the team spirit amongst your lovely volunteers was just amazing. We really enjoyed helping to create the new banks in the stream and can't wait to see the end result, once all the planting is done. We were so pleased this week to spot a kingfisher, and hope that many more species will be making it their home in the months and years to come – thanks to the work of ARK!"*
>
> **Sarah Owens, Froxfield Parish Clerk,** who has been volunteering with her husband to restore the Froxfield stream.

Himalayan Balsam

The purple invader that must be contained.

First recorded in the wild in 1855 following its introduction as a garden ornamental in 1839, Himalayan balsam (*Impatiens glandulifera*) is an annual plant native to the west and central Himalayas.

Regarded as the UK's tallest annual plant, it can grow to 2.5 to 3m and is characterised by its scented pink-purple trumpet-shaped flowers, lance-shaped leaves and hollow, fleshy stems that turn from green to pinkish red as summer progresses.

Known as 'Touch-me-not balsam' on account of its explosive seed capsules that can distribute seeds up to 4m, it is now widespread along our rivers, lakes and streams because of its ability to colonise both upstream and downstream. It then forms dense thickets that left unchecked reduce biodiversity by smothering and outcompeting native plants for space, light, nutrients and pollinators.

In riparian areas the loss of these perennial native species in turn reduces the abundance and diversity of the invertebrates that depend on them. It also decreases soil stability and leads to increased riverbank erosion because the shallow-rooted Balsam dies back over the winter period.

Control methods can be physical or chemical; physical removal should be regular and ideally completed before flowering in June, thereby preventing the plant from setting seed. Because their roots are shallow, plants can be pulled by hand, although strimming may be quicker for larger areas provided it is completed regularly to prevent flowering. As long as they haven't set seed, any removed plants can be composted without the need for burning.

From 25 March you can report your own balsam sightings using our new tracker app for Android or iPhone. Just search for Epicollect5 in your app store and select the ARK Himalayan Balsam option. We will use your reported sightings to plan our summer Balsam removal programme.

For more information regarding Himalayan balsam and other invasive non-native species visit the GB Non Native Species Secretariat at: www.nonnativespecies.org/home/index.cfm

Martin Kent

Stitchcombe Fish Pass

Another helping hand from ARK for the Kennet's fish.

Before Christmas we completed the long-awaited fish pass at Stitchcombe Mill. Working in partnership the Environment Agency and the River Keeper, and using local contractors, we have built a new channel which allows fish to bypass the sluices that feed into the weir pool. The new pass will mean that fish can swim up and down the river whatever the state of flow, avoiding the obstacle that the sluice structure creates for them.

The new fish-pass incorporates an innovative design by Darryl Clifton Dey. Rather than using conventional horizontal stop logs or a letterbox arrangement the fish-pass channel entrance is controlled by a structure that can be made wider or narrower as required to control the flow. The reason is to benefit species like bullead and stoneloach, which are present in the river but struggle to navigate over horizontal obstacles.

The new channel that has been created has the added benefit of offering new spawning habitat for fish and new bankside habitat for water vole.

Charlotte Hitchmough

Things Are Happening in Froxfield!

Local residents have stepped into waders and rolled up their sleeves to help restore their stream.

Over the last two months our professionally led Community River Restoration Days have been a huge success. Our regular volunteers have been working alongside the Parish Council and other villagers, learning about their chalk stream and what it needs to be healthy.

Locally coppiced hazel on Freeman's Marsh has been made into faggots (bundles of branches) that we pin into the river to create a more natural and sinuous riverbank.

In May a Community Planting Day will establish a corridor of native marginal plants that send out roots and rhizomes that hold the riverbank together, prevent erosion and provide a rich habitat for a variety of wildlife.

What's more, our Yellow Fish campaign has hit the village. Chairman of the Parish Council Pat Adams said, 'The Yellow Fish project is a great reminder for us. So many people I have spoken to had no idea that these drains went straight into our rivers and streams'.

Chemicals, paint, cigarette butts, litter and dog poo all cause pollution to rivers. Gluing Yellow Fish plaques next to drains and leafleting local homes has raised awareness that it should be Only Rain Down the Drain.

Anna Forbes

St Nicholas Primary School, Baydon

ARK has been working with St Nicholas Primary School to create something really special.

We have together created an exceptional space for rain water to slowly infiltrate the ground and recharge the aquifer. This reduces sediment and storm water runoff flowing into the Kennet.

Plants have been chosen that can cope with long dry periods and sudden downpours while a bridge and large water-play trough make the space a fun place for the students. The trough gets its water from an enormous water butt that is connected to a guttering downpipe.

The project is all about getting students, teachers and parents to think about water and how we use it and deal with it.

Once again gold-award-winning garden designer Wendy Allen has conjured up a garden full of SuDS (Sustainable Urban Drainage Scheme) features and brought it to life with the help of our volunteer team, parents and a small corporate volunteer team from Travelport.

It is a pleasure to have continued our relationship with St Nicholas and we are currently running our Trout in School project with their Year 3/4 class. By nurturing tiny baby trout in a tank the children are learning how sensitive these fish are and what they need in the river to survive.

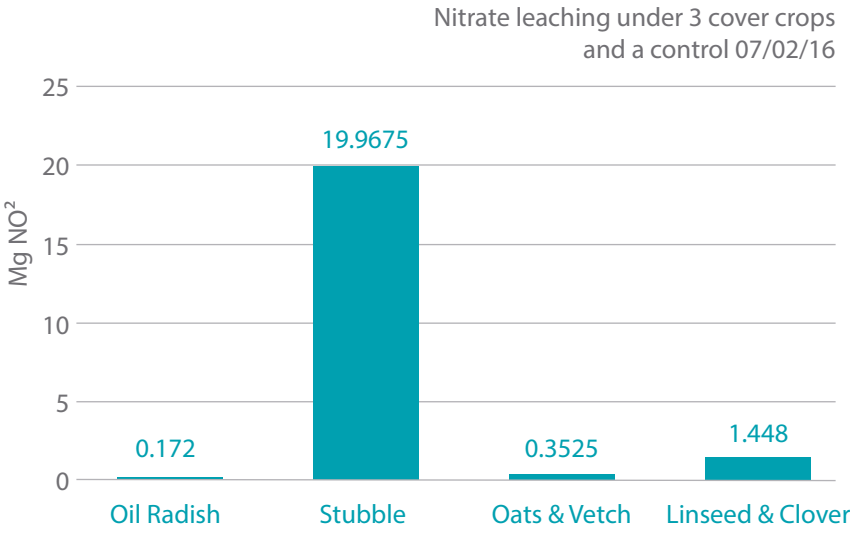
The project lasts for three months and over that time the class are witnessing at first hand the stages of the brown trout life cycle and discovering how amazing chalk streams and rivers are. We also incorporate the importance of being Water Smart into our activities – the less water we all use the more that is left for the chalk stream and their trout.

Our Rainscapes project is a finalist for Conservation Project of the Year in the Wiltshire Life Awards, so fingers crossed!

Anna Forbes

The New Green Revolution

Cover crops are the route to healthier soils and a cleaner river.



Cover crops are planted after the main harvest to reduce winter soil erosion, improve soil quality and encourage biodiversity. Some arable farmers in the Kennet catchment have now been growing them for six years, knowing that the benefits are always going to be long-term; those that expect yield boosts and nitrogen savings in the first year will be disappointed. As we learn more about cover crops, we are expecting year six to provide noticeable increases in the water-holding capacity, friability, drought tolerance and general health of soils.

And we are also beginning to understand more about when and how the cover crops return the nutrients that they have captured to the following cash crop. Green, leafy cover crops break down quickly when the soil temperature rises in the spring and may return nitrogen, phosphorus and potassium back into the system in a matter of a few weeks. On the other hand, woody, fibrous cover crops that contain a lot of lignin break down more slowly and may not release their captured nutrients until the following year.

Choosing cover crops appropriate to the following spring-sown crop allows the farmer to cut back on nitrogen and other fertiliser applications with confidence. For example, a green, leafy cover crop may work best if the following crop is spring barley, which does most of its growing in an eight-week period from April to June. Sugar beet or maize, however, are still growing in September so the preceding cover crop should ideally be slightly more fibrous and less green and leafy. As an American field trials scientist puts it, 'Its like trying to time a meal to come out of the oven exactly when the hungry dinner guests arrive'.

Tim Clarke

Graph: *The concentration of unused nitrate 1 metre below three different cover crops and a control of bare wheat stubble. With cover crops the water leaches down, but the nitrates don't!*

Stonebridge Annual Review

Stonebridge Meadow on the eastern outskirts of Marlborough is jointly owned by ARK and Marlborough Town Council. The way it is managed is set out in the Stonebridge Management Plan, which explains the overarching principles, along with more detailed actions. To ensure that the process is transparent Marlborough Town Council and ARK hold an annual review, open to the public. This took place on 23 January, and we were delighted to welcome naturalist Peter Marren who spoke enthusiastically about how lucky we are to have open access to chalk stream and meadow within walking distance of the town centre, and what a welcome breathing space it offers for people and wildlife alike.

Over the coming months we will be exploring whether it is possible to build a second footbridge to create a circular walk from the north and south bank.

The Stonebridge Management Plan is available on ARK's website.

Charlotte Hitchmough

A Snipe was recently spotted at Stonebridge Wild River Reserve during the snow. Winter visitors to the south of the UK, Snipe frequent well-vegetated marsh and wetland areas and are very hard to spot due to their amazing plumage.

ARK People

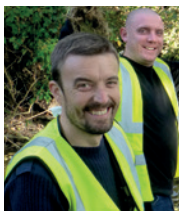
Karen Davies

For 16 years I have worked with farmers and landowners in the Kennet Catchment. As a Catchment Sensitive Farming Officer my main focus is on improving water quality in the Kennet and Lambourn by encouraging voluntary measures on farms to reduce sediment, phosphate and nitrate loss from fields and yards.

Pat Adams

I have lived in Froxfield, with my husband Barry since 2005. I've been on the Parish Council for 10 years and am passionate about our lovely village. I am so pleased that we have been able to progress plans to develop our water meadow into an area of natural beauty. Working on the river I have learnt so much about our environment and how important it is that we look after these precious places.

Matthew Walker



I'm a Project Co-ordinator in Thames Water's water efficiency team. I really enjoy using my knowledge of conservation to work with ARK to highlight how water use impacts the environment. I grew up among the chalk streams and winterbournes of Dorset (or winterborne as they often spell it down there) as well as living on a boat for five years, so water is close to my heart!

Dates for Your Diary

Saturday & Sunday 11–12 May
We will be at **The Sportfish Show**, Reading. A packed weekend of seminars, demonstrations and a chance to try out tackle from all the leading manufacturers. Visit www.sportfish.co.uk/reading-show for more information.

Tuesday 23 April
Our Big River Clean (part of The Great British Spring Clean) at Fobney, Reading is open to anyone who would like to get involved and has a few hours to spare.
Contact martin.kent@riverkennet.org for more details.

Saturday 15 June
River keeper Rob Starr leads a 2.5 mile early morning **Dawn Chorus Walk** and bird-ringing demonstration in partnership with Hungerford Town and Manor. Meet in the Fisherman's Car Park, Denford at 5.45am for a 6.00am start – but with the prospect of breakfast at a local establishment for those who want it. Advanced booking essential.
Contact anna@riverkennet.org

Sunday 7 September
ARK members **Summer River Walk** at the beautiful and usually private Barton Court Estate, Kintbury. More details will be circulated closer to the date. This is a new location for the walk, so an opportunity not to be missed.

For more details on all these events see our website or contact linda@riverkennet.org

Websites Worth Visiting

The National River Flow Archive (NRFA) is the UK's focal point for river flow data.
The NRFA collates, quality controls, and archives hydrometric data from gauging station networks across the UK including the extensive networks operated by the Environment Agency (England).

To find out more please visit: https://nrfa.ceh.ac.uk

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Members of ARK receive a copy of this newsletter either by mail or email.

If you'd like to find out more about ARK, volunteering opportunities or membership please visit our website at www.riverkennet.org or email anna@riverkennet.org

We hope you have enjoyed this newsletter and if you have any comments or ideas for future issues, do please pass them on!

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