



2015 Review



Above: Searching through riparian plants for signs of water voles

The water vole population on the River Chess is one of only two natural populations of water voles remaining in Buckinghamshire, the other being on the Misbourne. Added to the fact that the water vole is Britain's fastest declining wild mammal, it means that it is essential that we take rapid action to conserve the population. We would like to urge landowners to be vigilant for signs of mink and to get in touch if they would be willing to host a mink raft on their stretch of river. If anyone spots a mink in the Chess Valley, please email riverchess@tiscali.co.uk with details of the sighting.

The Chess water vole population has been surveyed every two years since 2001 and the 2015 survey was the second time that the RCA has taken the lead in coordinating the survey, with support from BBOWT and the Chilterns Chalk Streams Project. We'd like to thank all of our volunteers and the landowners who so generously allowed us access to their land. Monitoring so much of the river also enabled our volunteers to record the presence of invasive species, such as Himalayan balsam, and to report issues of concern, including illegal long-line fishing rigs on the river, to the Environment Agency.

The full survey results will be released in 2016.

Right: Mink can be detected using a clay pad placed on a floating raft on the river. These footprints were found in 2015

Fears Grow for Chess Water Voles

Preliminary results from this year's survey of the river's water vole population suggest an alarming 46% decline in the population from 2013. This follows a 32% decrease between 2011 and 2013, meaning that this important colony could be under threat of extinction once again.

What is the cause? Routine monitoring of key sites on the river has revealed that invasive, non-native mink are once again in the valley. This predatory species was largely responsible for the 97% crash in the local water vole population between 2001 and 2003. Colony recovery after 2003 was only possible thanks to a concerted effort to trap and humanely kill the mink.





Above: *Heptagenia sulphurea*, one of the eight target groups of invertebrates that our monitors look for in their monthly samples

More Monitors for Pollution

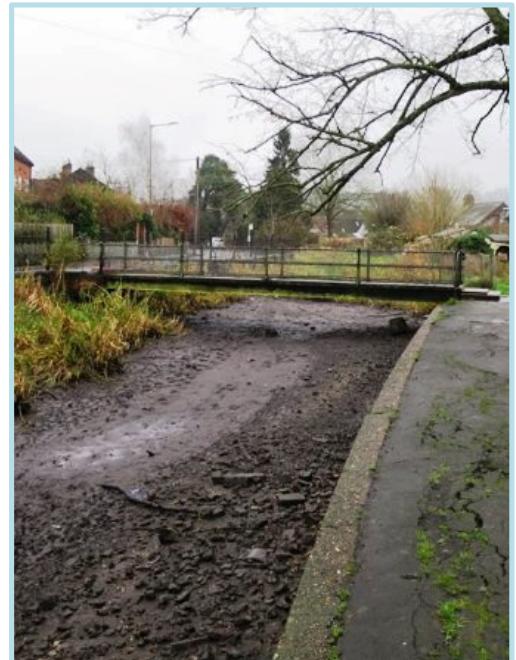
Thanks to the Chilterns, Herts & Middlesex Riverfly Hub, of which the RCA is a member, five new volunteers qualified as Riverfly Monitors this year. All are monitoring on the Chess, which has enabled us to increase the number of sites where we monitor for pollution to 11, giving us good coverage along the length of the river.

Every month, the monitors visit their allocated site and carry out a kick sample on the river bed. They analyse the resulting sample to estimate the abundance of eight groups of river invertebrates. If the numbers found fall below a set level, we alert the Environment Agency, as it may indicate that a pollution incident has occurred. We also feed the data into the National Riverfly Partnership database. We have been monitoring since 2010 and are building up a long-term set of data, which also allows us to look at the impact of other factors on riverflies, such as low flows and the input from the Chesham Sewage Treatment Works. The monthly visits to the river also enable our volunteers to develop a good knowledge of their sites, enabling them to spot and report invasive species and habitat changes.

Abstraction & the Upper Chess

As reported in the 2014 Annual Review, our continual lobbying about low flows on the Chess has borne fruit as an investigation was started to look at the impact of abstraction on the Chess in its upper reaches. We are particularly concerned about the effects of the 52% increase in abstraction in the Upper Chess catchment since 2000. Whilst still in its early phases, representatives from the Environment Agency, Affinity Water, Thames Water, the Chilterns Chalk Streams Project, Bucks County Council, Chesham Town Council and the RCA are working together to gather data to find out what effect abstraction in the upper catchment is having on flows in the river.

In December, we appealed for volunteers to measure river flows to enable us to gather more data. We were delighted with the level of response and the Environment Agency will be running a training course for these volunteers and loaning us the equipment to enable us to start measuring flows in the river in Chesham.



Above: Dry riverbed at Kitty's Bridge, Waterside, Chesham



A Great Day Out

We have hosted several working days on the river for groups of volunteers this year. Many of these groups are from local companies, such as these GE volunteers, who were looking for the chance to do something different and enjoy the great outdoors.

With our supervision and equipment, the volunteers carried out a number of vital tasks, such as vegetation management and habitat enhancement. The volunteers learnt new skills and had lots of fun, whilst benefitting the local river environment.

If your workplace would be interested in having a day working on the river, do get in touch with our secretary on riverchess@tiscali.co.uk.

Kids Get Their Feet Wet

We believe it is vital that children learn about their local river, and most importantly, get to have fun in the river. This can start a life-long respect and love for the Chess, helping to safeguard this rare habitat into the future.

We are committed to hosting river visits for schools and youth groups, where children get the opportunity to see and hear local wildlife and try their hands at riverfly sampling and other scientific techniques. We also continue to expand the Trout in the Classroom project that allows pupils to rear young trout in specialist tanks before releasing them into the Chess.

This year, we have enabled over 700 children to explore the River Chess, and we hope, make memories that will last forever.

Totally Thames Water Blitz

The Chess was represented in a mammoth one-day volunteer effort to sample the water bodies in the Thames River Basin, contributing to an impressive dataset of 645 records. Some of our Riverfly Monitors collected and analysed water samples for nitrates, phosphates and evidence of eutrophication. The data has been added to the FreshWater Watch global database and the results can be seen at:

<https://freshwaterwatch.thewaterhub.org/to-totally-thames-water-blitz>

As expected, the results varied along the length of the river, but high levels of nitrate and phosphate were detected at a number of locations. So, there is work to be done to reduce pollution inputs to the river.

Fishing School at Restore Hope



The late Peter Lapsley, a well-known author, journalist, fisherman and fly-tyer, bequeathed his entire fly-tying kit to the Wild Trout Trust. Proceeds from the resulting auction were used to buy 14 fly fishing kits which were donated to the RCA to establish a fishing school on the Chess. This is highly fitting, as Peter caught his first trout on the fly on the River Chess, aged just 12.

The first outing for the kit took place in July, when 14 students from Stony Dean School, Amersham, spent the day at Restore Hope, Latimer Park. All pupils had the opportunity to learn the basic skills of casting; three fish were hooked and one was landed – a great result for their first attempts at fly fishing.

We are very grateful to Liza Lapsley, Neil Patterson, the Wild Trout Trust, the Latimer Park Fishing Club and Restore Hope for supporting this initiative.

Pollution Reports

We have reported 17 incidents of river pollution to the Environment Agency during 2015. Several of these reports related to road run-off pollution in the Vale Brook entering the River Chess at Duck Alley in Chesham. But we also had many reports of sanitary items entering the Chess from the Chesham Sewage Treatment Works, an issue that we continue to lobby Thames Water about.

If you see pollution in the river, please report it to the Environment Agency on 0800 80 70 60, and we would also love to know about it.

Thanks to all our supporters for their continued interest in the River Chess.

Contact Us

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