

THE STRIPLING

Newsletter of the Upper Thames Protection Society



Issue 33, October 2013

Open Meeting and AGM

Wednesday 6th November 2013, starting at 7.30pm

Cricklade Town Hall Annexe

"Improving the Nature of our Rivers"

Speaker: Petrina Brown, Cotswold Water Park Trust

Membership only £2 a year. Non-members welcome
Upper Thames Protection Society - Registered Charity 299418

Chairman's Statement

Welcome to the 2013 issue of The Stripling.

What a difference a year makes. As I look back to this time last year and at the article you will see later in this magazine in connection with North Meadow, we had effectively had twelve months of poor, wet weather. This summer of course the sun has shone and the underlying water levels have fallen and this too will create its own management issues and requirements.

The newsletter highlights a much greater involvement from the Environment Agency and other government bodies in assessing, maintaining and hopefully improving the environment of the Upper Thames. Increasing urbanisation is putting pressure onto the flood plain, both from heightened level of water flow and also from an increasing amenity requirement.

The challenges remain and your involvement counts in this process.

We look forward to seeing you and any non-members at the AGM at the beginning of November.

Chris Graham
Chairman, UTPS

Upper Thames – "Challenges and Choices"

Public Consultation

How do you think the water environment should be protected and improved for the benefit of communities, businesses and wildlife?

Have your say on the issues affecting the water environment and how you think these issues should be tackled.

This is a public consultation and we, the Environment Agency, welcome everyone's views.

The Environment Agency is inviting you to contribute to a consultation to help shape and develop the draft of the next Thames River Basin Management Plan and ultimately, the final plan too. The draft river basin plan will set out what actions we all need to consider to protect and improve our water environment from 2015 to 2021, taking account of the results of this consultation and continuing investigation work.

'Challenges and choices' reviews and discusses the latest information and data that we have on the significant issues affecting the water environment at a local, river basin district and national level. You can provide your views on a specific issue, such as pollution, or river flows, or you can provide views on your local water environment or for England as a whole.

You can find the Challenges and choices consultation at

<http://www.environment-agency.gov.uk/research/planning/140092.aspx>

The link below is to the Thames River Basin District: Challenges and choices document which describes what we think are the significant water management issues:

<https://consult.environment-agency.gov.uk/file/2532695>

Submit your comments online on our e-consultation webpage at:

<https://consult.environment-agency.gov.uk/portal/ho/wfd/water/choices>

The formal closing date for responses to the Thames River Basin District Challenges and Choices consultation runs until 22nd December 2013.

Oliver Roden
Senior Environment Planning Officer
Area Environment Planning Team
Environment Agency, Red Kit House, Wallingford

River Monitoring Programme

The Environment Agency Analysis and Reporting team, based in Red Kite House, Wallingford, coordinate the freshwater ecology and water chemistry monitoring programmes across the area. We collect a range of samples every year to assess the health of our rivers using criteria set out in the Water Framework Directive, WFD:

Aquatic Macro-Invertebrates: Often used as indicators of water quality, but can also be used to indicate altered flows, sedimentation pressure and habitat loss. They are less mobile than fish and are therefore more vulnerable to local changes in water quality, flow or habitat.

Macrophytes and Phytobenthos: The primary reason we monitor macrophytes and phytobenthos is to monitor the effect nutrients have in our rivers which, when high, can cause eutrophication.

Water Quality: We use a basic suite of parameters, termed physico-chemical, to identify organic and nutrient pollution.

Ammonia	Dissolved Oxygen	pH
Phosphate	Temperature	

Further details of the WFD classifications can be found in the River Basin Management Plan and the Challenges and Choices consultation. However in brief, our investigations in the Upper Thames catchment have highlighted manmade changes to river channels and pollutants are the most significant issues. Phosphorous, a key nutrient which can cause excessive plant and algal growth, is elevated across most of the catchment.

The Upper Thames catchment is made up of 35 smaller units called water bodies. Of these 65% of them are at either poor or moderate ecological status. These failures have been further investigated and reasons for failure have been identified. Figure 1 below shows the breakdown of these failing elements; phosphorus is the most commonly failing element in the catchment.

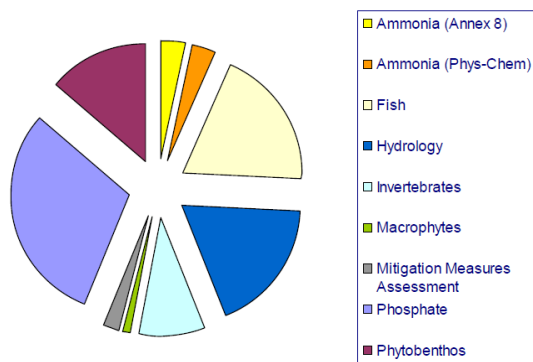


Figure 1 – Element failures investigated in the Upper Thames catchment. The size of the wedges is relative to the number of investigations into that factor.

Because the phosphate failure is so significant we have revised and increased our macrophyte sampling programme to assess the implications this has on the

plant ecology. As of 2013 the monitoring programme consists of 48 physico-chemical sampling points and 53 ecological sample points (Figure 2).

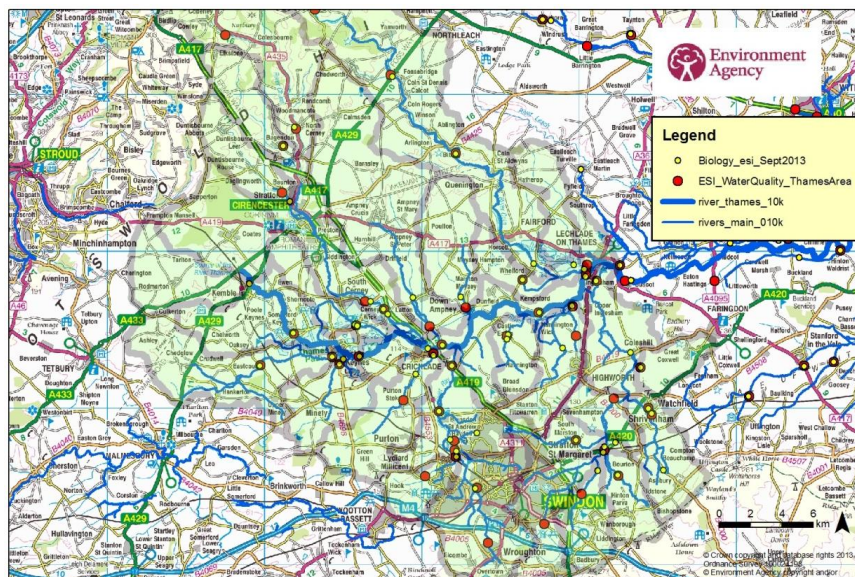


Figure 2 – Map of the Upper Thames Catchment detailing the location of EA monitoring stations

Deciding what to do about these challenges is not something that we, the Environment Agency, can do alone. We need all sectors and communities to play their part and help to make informed choices about what actions to take to achieve a better water environment.

David C Brain
Analysis & Reporting Team
Environment Agency, Red Kit House, Wallingford

The WILD Project: Improving the Nature of Our Rivers

The WILD Project – it stands for Water and Integrated Local Delivery - is a collaborative project. Project partners include the Gloucestershire Farming and Wildlife Advisory Group (FWAG), Countryside and Community Research Institute, Cotswold Water Park Trust and Gloucestershire Rural Community Council.

The project area includes 11 parishes/towns in Gloucestershire and 8 in Wiltshire and the overall objective is to enable local communities to improve the 'water environment'. The key driver in this is the government's responsibility to meet its commitments under the Water Framework Directive.

The project aims to encourage local communities and landowners to become directly involved in the understanding and management of local water courses. With local community input, and commitment from local landowners, the project aims to devise and deliver a plan of enhancements and management advice over the 3 year period to help achieve Good Ecological Status in water bodies within the project area.

Modified Rivers

As humans have built towns, roads and transport infrastructure and agriculture has become more intense, the rivers have been modified and are often prevented from fulfilling their natural function.

Rivers in the local area have been subject to a degree modification, including straightening, deepening, dredging and impounding by weirs. In some places trees grow very close to the banks and prevent plants growing by blocking the light.

All these factors reduce the diversity of the habitats in the rivers which in turn reduce the ecological status of the rivers.

Priority Water Bodies

There are 5 Water Bodies within the Cotswold Water Park Boundary that the CWPT are focusing on, these are the;

- 1) Swill Brook
- 2) Ampney and Poulton Brooks
- 3) River Thames (Kemble to Cricklade)
- 4) Churn (Baunton to Cricklade)
- 5) River Coln

WFD Priorities (Ecological Status)	Water body	Failing to achieve Good Ecological Status due to...	Local Area
Top priority (Moderate)	Swill Brook	Fish	Ashton Keynes Somerset Keynes Hankerton Cradwell
Top priority (Bad)	Ampney and Poulton Brooks	Fish Hydrology	Ampney Crucis Ampney St Mary Ampney St Peter Down Ampney
Very High (Moderate)	River Thames (Waterhay to Cricklade)	Fish	Ashton Keynes Cricklade
High Priority (Bad?)	Churn (Baunton to Cricklade)	Fish Invertebrates Hydrology	Baunton Stratton Cirencester Siddington South Cerney Cerney Wick Cricklade
Medium Priority (Poor)	River Thames (Kemble to Waterhay Bridge)	Fish Hydrology	Kemble, Ewen, Somerset Keynes Ashton Keynes
Medium Priority (Poor)	River Coln	Fish Macrophytes	Quenington Fairford Whelford Lechlade Buscot Kelmescott

Works on the ground

The works we would be looking at conducting will be aiming to diversify the channel to create a more varied habitat for plants, invertebrates & fish.

Obviously in order to do any of these works on the ground we would need support from the local community and the landowners and it's the recognition of this need to work together that the project is trying to address. By restoring some of the natural function of the watercourses in our local area, it will enable the rivers to provide the wildlife, recreation, aesthetic and resource values we all enjoy.

Works	Why
tree works (pollarding/selective thinning to reduce shading)	increasing the light allows aquatic plant to grow
introduction of deflectors to create pools & speed flows to expose and clean gravel bed	this increases in channel habitats
introduction of gravel where it has been lost	this provides habitat for fish spawning
installing soft engineering structures (like willow faggots, or tree trunks)	diversify flows to prevent silting up
creation of ponds and backwaters	this recreates habitats lost by disconnecting the river from the flood plain & provides a refuge for fish fry during flood events
re-meandering of straightened channels and removal of embankments	this increases in channel habitats
invasive weed control (Himalayan balsam)	Increase native vegetation cover & prevent erosion
fencing off livestock	prevent livestock damaging the bank of channel

Petrina Brown
WILD Biodiversity Officer
Cotswold Water Park Trust

North Meadow National Nature Reserve

North Meadow NNR is an ancient flower rich hay meadow at the edge of the small market Town of Cricklade in North Wiltshire. The 110 acre site mainly owned by Natural England and jointly managed with the Cricklade Manorial Court is Lamas land, a hay crop is taken in July then aftermath grazed from August 12th to February 12th, ground conditions permitting. 80% of the British population of Snake's head fritillaries can normally be found in North Meadow - but the blooms were not so abundant this year.

Where have all the flowers gone?

Flooding inundations on North Meadow commenced on 28th April 2012 and it just kept raining and flooding until the last flood on 20th March 2013. During a summer flood the site can become too wet to allow farm machinery to take the annual hay cut. When the meadow is not cut the vegetation becomes tall and then falls over, creating a mat that rots down. Smaller flowers are smothered or shaded out and will not appear the following season. Additionally some

species cannot tolerate being wet during the growing season and will die as a direct result of being flooded, so many species can be lost.

Botanical monitoring has been carried out annually on the site since 1998, and therefore represents the longest available data set for this grassland type within the UK. Since 2008 the survey work has fallen under the aegis of the Floodplain Meadows Partnership (FMP). The monitoring undertaken by the FMP showed that following the summer floods in 2007 & 2008,

where farm machinery was able to cut the hay, the monitored plots retained their species diversity, whilst the



plots in those areas that were too wet to cut for one year lost many species. Those that were not cut for two years continued to lose their wildflower richness.

North meadow stayed too wet to take a hay crop or graze by cattle in 2012, the cold wet spring this year delayed the emergence of Fritillary shoots until 8th April (a full month later than in 2012), but it is the dense matted thatch that lay over much of the meadow like a thick blanket that has blocked out light and air to the developing sward beneath. The FMP's annual Fritillary count took place on 23rd April using 200 quadrats; it was the quickest ever count as very few Fritillaries were found.

After consultation with the FMP and botanists as to the management requirements of this situation, the decision was taken to try and remove as much of last year's thatch as soon as the meadow dried out enough to allow tractors on, this would let the light in to the developing grasses and herbs.

Progress so far

About two thirds of the meadow was mown and baled, and 15 acres chain harrowed in May. A dry summer has meant that the farmers could take the hay crop in July and August as normal although some of the wetter areas that could not be cut in May (mainly sedges) proved very difficult to cut.

As I write the Hayward to the Cricklade Manorial Court is assisting a local farmer to put 90 head of cattle on the meadow. Grazing is necessary to maintain the rare lowland hay meadow habitat which supports the great diversity of species on North Meadow.

It will take many years for the meadow to return to its former glory, good management practices of taking a hay crop and aftermath grazing are essential for the meadows survival. The Snakeshead Fritillaries will push their shoots through in April – how many? We will just have to wait and see.

Anita Barratt

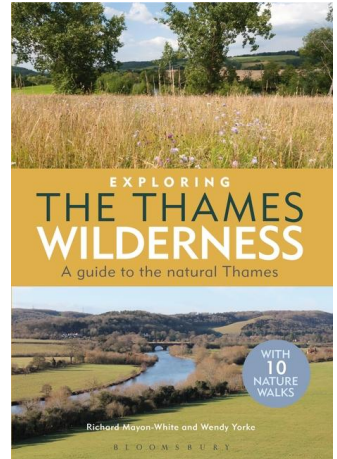
Reserve Manager, North Meadow National Nature Reserve

Exploring the Thames Wilderness

The River Thames Society (RTS) has been working to conserve the natural beauty of the Thames since 1962. The RTS has been concerned with the problems of pollution, flooding, misguided development, excessive abstraction of water and the upheavals in the official bodies that are responsible for the Thames. Most of all, we have been keen to maintain and improve public access to the river. So we have been pleased with the popularity of the Thames Path as a National Trail. Equally delightful are the new nature reserves have been created on the banks of the river, in some places on derelict industrial sites.

In 2011, the RTS river wardens, who monitor reaches of the Thames, collected information about the nature reserves. We discovered that there were 154 reserves with public access that are within a mile of the Thames. The sites vary in size and type of habitat, but all are worth a visit by people who are walking beside, or boating upon, the Thames. Our observations are

described in a website - www.thameswilderness.org.uk and a book, "Exploring the Thames Wilderness", published in May 2013; Price £14.99 by Adlard Coles (Bloomsbury Books). The book covers the Thames from source to sea, including the attractions of the river in Gloucestershire and along the Wiltshire border above Lechlade.



The project is expanding to explore the tributaries of the Thames. If people would like to help with information and ideas, they will be very welcome – please contact me.

Dick Mayon-White

RTS river warden coordinator (non-tidal Thames)
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Update on the Cricklade Section of the Thames Path National Trail

Improvements during the 2012 - 2013 financial year carried out by the Thames Path Office, by negotiation with UTPS were:

- *Construction of a new bridge on an improved alignment and hard surfacing of an enclosed section of path leading to it (treacherously uneven and muddy during wet weather).*
- *The replacement of a sub-standard gate at a junction with a local road by one that would allow easy access by mobility-buggy users. This was accompanied by the removal of adjacent barbed wire fencing and surfacing of ground immediately beyond the gate.*
- *Alongside another extremely muddy stretch of enclosed path, vegetation was cut back to allow walkers to avoid the central area of mud. This intervention will be assessed for effectiveness during the winter of 2013. Clearance work on this and on the other section of improved path will be carried out twice a year by contractors or volunteers.*
- *About 6 months ago, a footbridge was built across a gateway between a field adjoining North Meadow that was impassably flooded during the autumn and winter of 2012/13.*

Future improvement initiatives - it has been agreed that work should be carried out on a sub-standard length of the Path near to where it enters Cricklade from the east. The bank above the walking way will be partially removed to allow the path to be re-graded, making it suitable for buggy-users and better for walkers in general. The surface will be grass-seeded. The best time for carrying out this work will be the spring or early summer of 2014. Out of Cricklade - the Path on its way through the Cotswold Waterpark is scheduled to be given a stone-based surface.

Margaret Hunt, Secretary, UTPS

Note: The opinions expressed by correspondents are not necessarily those of the Upper Thames Protection Society. Please send contributions, letters, comments to Editor: helengoody@talk21.com