

# River Wensum

## Restoration Strategy

Issue 15, September 2015

### River restoration competition winner

In our last newsletter we invited applications for small-scale community lead restoration projects to improve the ecology of the Wensum.

We are pleased to announce that the winning entry was submitted by Swanton Morley Parish Council, with their admirable proposals to undertake enhancements on Mill Common. This site is an area of floodplain grassland, located a short distance upstream of Swanton Morley weirs, which is owned and managed by the parish council.

Mill Common is one of 20 or so land parcels that are included within the River Wensum Site of Special Scientific Interest (SSSI), and it supports a notable wetland flora.

After obtaining the necessary consents and permissions, the enhancement works were implemented this spring. These involved lowering a short section of spoil bank along the river to allow flood water to 'wet-up' a low lying area of the Common. This does not increase local flood risk and allows improved connectivity between the river and floodplain during periods of high river flows.

Increasing the wetness not only improves conditions for wetland plant species, but will also potentially create suitable habitat for Desmoulin's whorl snail, one of the European features of the Wensum Special Area of Conservation. It is hoped that the works will result in increased numbers of bird utilising the site during the wetter winter months, including waders such as snipe and lapwing.

The land was previously part of local author E C Keith's "Swanton Morley Bog". In his book *Woodcock and Snipe*, published by Philip Allan and Co. in 1936, he includes a fascinating description of the site. Mr Keith states that 1931 proved to be the last good year, for drainage was in progress.

He writes: "I still hope that with a return of real winters the river will again, with a little assistance, rise the necessary 18 inches to overflow its banks and a few weeks of this would bring the bog back to its original self."

We would like to think that working with Swanton Morley Parish Council we have provided the necessary "little assistance" and that during higher flows we will see a small part of the bog return to its former glory.

The stretch of river adjacent to Mill Common has limited tree cover. As part of the project four small fenced enclosures have been constructed close to the river channel. Native alder trees have been planted within these, protected from the risk of damage by the livestock that graze the Common. Tree cover along the river corridor is important for a number of reasons:

- Trees provide physical habitat diversity that in turn supports a diverse range of animal and plant species.
- They provide underwater root systems of value to fish and invertebrates.
- Tree root systems stabilise river banks and protect them from erosion, especially on the outside of bends.
- By providing shade, trees suppress growth of aquatic vegetation and moderate extremes in water temperature.

- In the longer term, tree cover can provide a natural source of woody material within the channel, a key component of river systems that is lacking in many lowland watercourses.
- Tree planting can enhance local landscape quality.
- Trees provide nesting sites for birds, and a food source for mammals, birds and invertebrates.

We would like to thank Swanton Morley Parish Council (especially Bernie Marsham) for their help and support in delivering this project.



Creating spillway by lowering spoil bank



Tree enclosure planted with native alder

## New phase of river restoration begins on the upper Wensum

Work has started on our eighth major restoration scheme. To date we have improved 15 kilometres of the Wensum and the work we are undertaking this year will result in a further 2 kilometres of river being restored. The latest phase of restoration is taking place around the confluence with the River Tat, working downstream towards Dunton Road Bridge.

Like many other parts of the river, this section of the Wensum has historically been heavily modified, resulting in an over-wide and deep channel which does not provide suitable habitat to support the wildlife and fisheries characteristic of a Norfolk chalk river.

An example of the scale of past modifications is documented in the East Norfolk Rivers Catchment Board minutes for 1948. These state that £10,759.19d (£376,000 in today's money) would be spent improving the main river between the River Tat and Sculthorpe Mill, with one machine dredging this particular stretch between February 1948 and July 1949 working from both banks. The extent of the works can be seen in the significant spoil banks which exist today.

The restoration scheme will improve the physical habitat diversity of the river and look to selectively re-connect the floodplain, slowing the passage of flood water and helping to moderate downstream flood peaks.

We adopt a sustainable approach to restoration, making use of locally available materials such as timber and spoil banks, and re-distributing the existing gravel bed to reduce the need to import additional stone. The scheme includes reinstating 2 small meander loops located at the downstream end of the River Tat, close to where it joins the Wensum.



Meander restoration on the River Tat. The red line shows the pre-restoration course of the river. The blue lines show the location of former meanders (which can just be made out in the photograph). These have now been excavated, and the river restored to its former course.



Before (left) and after (right) photographs of reinstated meander loop.

customer service line  
03708 506 506

incident hotline  
0800 80 70 60

floodline  
0345 988 1188  
0845 988 1188

We are not looking to return the river to its original state, prior to any modifications, but rather to maximise the ecological potential of the present day system. The features we install aim to kick start natural processes and therefore act as a catalyst, enabling the river to return to a more natural form and function, to be more self-sustaining, and to benefit local ecology.



Section of restored meander loop



Restored section of river

## River Wensum mink project

American mink have presented a problem for local wildlife on the River Wensum for the last 30 years or more. This non-native invasive species is superbly adept at preying on water voles, water fowl, fish, and bank-side mammals to the point where there are local extinctions of some species. By 2003, the water vole population was in such dramatic decline that the River Wensum mink project was set up by Norfolk County Council and concerned conservation organisations. The aim of the project was to control mink numbers through monitoring and humane trapping, using an extensive network of dedicated volunteers.

Since then, between us, we have eradicated over 400 mink from the catchment and have seen water vole numbers rise again to the point where we now have a healthy population across the whole area. This has been one of the great recent success stories of practical conservation.

However, mink are elusive and mobile, able to travel many kilometres overland, and there is a steady trickle of mink into the catchment from outside. There are also areas in which no one is monitoring or trapping, where mink can re-establish themselves and spread to other parts of the river. If you would like to help, either by monitoring using a mink raft which detects mink, water vole and otter footprints, or by trapping, then please contact the project co-ordinator Paul Gambling at [mink@norfolkproject.org.uk](mailto:mink@norfolkproject.org.uk) or 07899 756107. For more information visit: <http://thenorfolkproject.org.uk/>



Modern mink raft and a female mink in a cage trap



## Catchment Sensitive Farming update

The Wensum Catchment Sensitive Farming project will be offering free advice to farmers over the autumn and winter months to help them address diffuse water pollution on their farms. The aim is to reduce sediment and phosphate runoff which can affect the valuable habitats and species of the Wensum Site of Special Scientific Interest, and pesticide runoff which can affect our drinking water.

We will be inviting farmers to attend workshops on improving soil management (especially post-harvest), the benefits and practicalities of using cover crops and controlled traffic farming, and how to manage ditches sensitively to reduce soil entering the watercourse. Watch out for your invite in the post!

We also offer free one-to-one farm visits to advise specifically on how you could ensure your farm is doing everything practical to reduce impacts on the Wensum.

The new Countryside Stewardship Scheme (<https://www.gov.uk/guidance/countryside-stewardship-manual>) has now been launched to replace the Environmental Stewardship Scheme, and by talking to your Catchment Sensitive Farming Officer you could improve your chances of getting a 'Middle Tier' agreement, which is now competitive.

You could also be eligible to apply for capital items such as concreting yards, sprayer wash down areas, and roofing for sprayer wash down areas, manure storage, livestock gathering areas, slurry and silage stores.

For more information or to book a visit please call: Paul Sorrell 07826 940397 or Rosanna Kellingray 07785513119

## Looking ahead

If you are interested in partnership working or would like further information, please contact us at the following email address: [river.restoration@environment-agency.gov.uk](mailto:river.restoration@environment-agency.gov.uk)

Or by post to: Adam Thurtle, Environment Agency, Dragonfly House, 2 Gilders Way, Norwich, NR3 1UB.

To save resources we would very much like to keep as many people as possible informed by email rather than sending paper copies. Please email us at the address above to be updated in this way. Please add your name and postal address in the body of the email so we can accurately identify you. Thank you.

