

Water for Wildlife Annual Report

January 2017 to January 2018

Cambridgeshire & Peterborough



Water for Wildlife
Project supported by
Anglian Water

White-clawed crayfish, Shingay

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This is a summary of Water for Wildlife work in Cambridgeshire and Peterborough between January 2017 and January 2018.

Bourn Brook

A survey of the brook from Byron's Pool to Caxton was undertaken this spring, recording non-native invasive plants and signs of otter, water vole and mink. Work to control giant hogweed and Himalayan balsam continued, and local people have started to remove or report balsam (the beginnings of a local river wardens scheme).

A separate survey report is available:

http://www.wildlifebcn.org/sites/default/files/bourn_brook_survey_report_2017.pdf

Giant hogweed

The Environment Agency treated the giant hogweed with glyphosate in May and September, using maps produced by the Water for Wildlife survey. Unfortunately the May treatment was not as successful as usual, due to a combination of conditions meaning the plants did not take up the herbicide as well as they should, and a wrong mix. Several plants which had clearly been sprayed managed to flower, and some of them flowered again after seed heads from the first flowering had been removed.



Giant hogweed flowering, having been sprayed with glyphosate one month previously.
Bourn Brook 2017

The spring survey showed a continuing reduction in the number of plants, from 91 records in 2011, 82 records in 2014 and 35 records in 2017 (corresponding to 60 plants; earlier surveys did not count the number of plants at each point).

One of the landowners downstream of the Caldecote road is planning some major scrub-thinning work along the banks of the brook this winter. If this goes ahead there is a risk of the additional light allowing more giant hogweed to germinate, but on the other hand it should be easier to spot plants. Currently this section has extremely dense growth and it is very difficult to find and treat all plants.

Despite the difficulties, it seems that the control is making progress and should ultimately be successful in eradicating this plant from the brook.

Himalayan balsam

Results showed that Himalayan balsam is still frequent along most of the brook. In order to attempt to quantify the changes, patch size as well as presence was recorded. Although previous surveys did not record patch size, the results suggest control is having a significant impact. Large patches of balsam were only found on the sections without control, including one that historically had very little balsam. Reduction in the amount of balsam downstream of the Bourn golf course was clear from the survey maps, and the number of plants appears to have reduced on the upper section as well, though this is based more on impressions on the ground than the survey maps. Local people around Bourn have become more involved in balsam control, and plants were pulled throughout the season on the upper stretch rather than solely on one or two visits.



Environment Agency
balsam-pulling team.
Bourn Brook 2017

Over the summer, a total of 19 balsam-pulling events were held, comprising 537 volunteer hours and 89 hours of staff time. This is comparable to last year's hours, but, as last year, the whole length was not visited, in favour of spending more time on the upper reaches. Eight local people from Bourn and Toft dedicated their time to balsam control, as did the Bourn cubs and a team from the Environment Agency, which made a big difference. Their efforts included putting up posters around the village, coming out on work parties, and spotting and pulling plants regularly.

Next year the focus will again be at the upper end of the brook. One of the landowners lower down is interested in providing a test release site for balsam rust fungus. If this goes ahead it could make control on the brook easier (although there will be no control on that section for 3 years – this is a section where there has been relatively little work by volunteers).



Bourn cubs after an evening of balsam pulling in Toft paddocks. Toft 2017

Water vole

This year's survey showed another increase in water vole signs, from 4 isolated spots in 2011 to signs along most of the brook. The section where bank clearance is due to take place had very few signs. It will be interesting to see whether this section becomes better used by water vole in future.

The dramatic increase in water vole signs suggest mink control has been successful. Two mink and a polecat were trapped on the brook during winter 2016-17 but signs are scarce.

Otter

Otter signs were also recorded during the survey, with the number of signs increasing from 11 in 2011 to 35 in 2014 and 90 in 2017. The reason for this increase is not clear.

Bourn Catchment projects

Work has begun looking at opportunities in the Bourn catchment to benefit water quality and natural flood management. Flooding is an issue in Bourn and Toft as well as for many of the farmers, and the brook is failing for phosphate under the Water Framework Directive. As there is no space for large-scale work, the aim is to persuade many of the landowners to undertake small-scale projects. A map of these will be maintained, ultimately with costed projects ready for any funding opportunities.

Funding has been obtained from the Environment Agency for three projects to be implemented winter 2017-18:

- Caxton Moats – divert water via moats (using older channel) rather than through existing ditch. This will only be partially completed, as work to desilt part of the moats was postponed by Historic England’s archaeologist due to ground conditions. It is not clear whether funding can be found to complete the work next summer. A drop-board sluice has been installed and can be used to divert water through the moats.
- Comberton meanders – re-instate one or two previously cut-off meanders. Plans have been drafted and are being negotiated with the landowner.
- Bourn airfield runoff wetland – feasibility study for improving water quality and regulating flows from a new development. A consultant has been commissioned to complete this work.



New drop-board sluice on the Caxton Moats bypass channel. This may be used to divert water into the Moats via an old stream course upstream of the sluice.

A site visit with Ed Bramham-Jones from Norfolk Rivers Trust (currently working on projects throughout the CamEO catchment) resulted in further ideas for the catchment enhancement map, and NRT may be able to assist with delivery.

Cambridgeshire Otter Survey

The county otter survey took place over the winter of 2016-17, with results published in 2017. The survey is a joint project with the Cambridgeshire Mammal Group, and surveys have been undertaken every 5 years since 1992.

A separate survey report is available:

http://www.wildlifebcn.org/sites/default/files/otter_survey_report_2017.pdf

A total of 291 sites were visited, mostly road bridges but including 10 new sites within Cambridge city. The results showed a slight decrease in sites with otter signs from 49% of those surveyed in 2012 to 41% of sites surveyed in 2017. There are a number of possible reasons for this, and the survey does not necessarily indicate a decline in otter numbers. Otter signs were found at half of the new Cambridge sites. Possible reasons for the slight decline include weather conditions, natural fluctuations, and the number of new inexperienced surveyors involved in the survey. This survey had a record number of new volunteer surveyors, who were trained and put a lot of enthusiasm and energy into ensuring all sites were visited, but they had less experience with difficult sites. The Mammal Group plans to revisit some of the

areas this winter where otter signs were expected but not found, to try to establish whether there is a true picture or an artefact of surveyor experience.



New surveyors checking for otter spraint on the River Cam. Hinxton Dec 2016

River Wardens

A river warden scheme in Cambridgeshire has been started, initially concentrating on a limited number of activities and locations, related to existing project work. There are currently two strands to the project: balsam wardens on the Bourn Brook and Riverfly monitoring on chalk streams. Balsam wardens are local to the brook and can check regularly for balsam throughout the growing season. This should lead to more effective control in those areas.

Riverfly

Funding was received from Cambridge Water to set up Riverfly monitoring on a number of watercourses in South Cambridgeshire. A training course was held and monitoring set up with the help of the Environment Agency on the Granta at Babraham, the Cam at Hinxton, the Rhee at Barrington, the Mill River at Wendy and Millbridge Brook at Gamlingay (tying in with the Bedfordshire River Wardens project). The Cambridge Water funds also supported recruitment and training of volunteer otter surveyors for the county survey. Monitoring sites will be registered on the Riverfly Partnership website so that results will be freely available online.



Initial Riverfly monitoring, Mill River, Wendy 2017

Wilhorn Meadow

Water for Wildlife is working with Huntingdonshire District Council to look at the hydrology of this meadow in St Ives and make suggestions for restoration. Dipwell readings suggest the site is dry for too long in summer, and wet for too long in winter to be restored to a floodplain meadow. The management regime is also not suitable as the site is grazed by cattle from May to September. One end of the meadow is also gradually becoming dominated by tufted hair-grass where ground was disturbed to create a new flood bank a decade ago. The tufted hair-grass, with the areas of rush and sedge, all of which are less palatable to cattle, make the meadow suitable for snipe. Suggestions will be made for alternative enhancement measures which are more appropriate than floodplain meadow restoration.

The meadow borders the River Great Ouse, and becomes severely poached along the length of its river frontage. Ideally bank protection measures would be agreed to reduce the sediment input to the river here. Some work here will probably be necessary as a consequence of the Defra's new farming rules for water.

Ouse Washes area ditch project

Funding was obtained for a demonstration fen ditch enhancement. A private ditch in the Manea and Welney IDB district was re-profiled in May 2017 to create a marginal ledge along one bank, with permission from the landowner and collaboration with the Middle Level Commissioners. Spoil was left along the edge of the field, approx. 3m from the bank top, to be spread over the field at the next opportunity.



Ledge being created,
Manea 2017

Vegetation at the toe of the bank was left, to improve bank stability and encourage plant growth on the new ledge. In some places, the bank had a dense growth of sedge at the base. On these sections a "turf" of sedge was cut and laid onto the new ledge. The rest of the ledge was planted with plug plants.

Due to uncertainty about water levels and timings of level changes (much of which depends on weather), sections of the ledge were put at different levels above the low winter level, in anticipation of higher water in summer.

By autumn, the whole ledge and most of the bank had re-grown. The sedge turfs were successful, resulting in a sedge patch extending some way up the bank in places. The only plug plants to survive were on the lower level ledges, as water levels were not raised as far or as soon as anticipated. Where common reed was present at the bank toe, it had dominated the ledge and bank, with very little survival of any plug plants. The highest sections of ledge were probably too high, and had more of a grassland flora with creeping thistle. In another year with more rainfall and higher water levels, these high sections might be more successful.

The site has not been surveyed in detail for water vole. A walk along the banks in early May did not find any obvious water vole signs, although the habitat looked suitable. By September, a brief visit showed water voles were present and using the new ledge. The high ledge sections will probably also be used by water vole. A section of the bank above the culvert at the road end of the ditch was reinforced with wooden piling and backfilled with soil, both to support the entrance track and to provide a kingfisher nest site. This has not yet been used but may be in future, as the ditch widens at this point with a deep pool.



Wood piling before back-filling. Holes drilled in the piling create kingfisher nest sites.

Hoffer Brook

A volunteer work party was held on the section between Foxton and Newton to tidy the site following last year's work. More faggot bundles were fixed into the brook to improve flow and protect banks. This section was also de-silted a second time, to remove loose silt mobilised by the previous work. Unfortunately the extreme low flows have continued, so the brook is still failing to achieve its potential. We are hoping for increased water levels to wash remaining silt from the restored areas and demonstrate the effectiveness of the restoration work.

Further downstream, a new ledge was installed with volunteers in collaboration with the Wild Trout Trust. Better flows on this section mean the ledge is making more of a difference here to the flows and channel morphology.



Ledge creation,
Hoffer Brook
2017

A funding bid was submitted for further work on the brook in 2017, but was not successful. Further funds will be sought in future.

Mink control

The Eastern Region Mink Control Group continues to co-ordinate regional mink control efforts. As part of the group, money has been awarded to Water for Wildlife and the Countryside Restoration Trust to extend previous trapping to the Great Ouse catchment.

Winter 2016-17

3 mink were caught on the Bourn Brook (1 female, 2 males, one of which was killed by road traffic). One female and 3 males were caught on the River Great Ouse at Willingham.

Other trapping locations with no mink:

Great Ouse Willingham (downstream of mink trap above), Stretham/Wicken area, confluence with Cam at Fish and Duck Marina, and outlet of Soham Lode at Barway.

River Cam Chesterton, Clayhithe, Bottisham and lower reaches near Kingfishers Bridge.

River Snail and Soham Lode Fordham Woods (2 rafts) and Barway.

River Lark Prickwillow (2 rafts).

Upper Cam catchment Several locations tried on the Bourn Brook, Hoffer Brook, Guilden Brook, Rhee and Cam

Winter 2017-18 (to December 2017)

2 mink were caught on the Bourn Brook (1 male, 1 female). A total of 4 mink were caught on the Great Ouse, all male, 3 at Barway, Soham Lode and one at Willingham.

Other trapping locations with no mink:

Great Ouse Willingham, Stretham/Wicken area, confluence with Cam at Fish and Duck Marina and outlet of Soham Lode at Barway.

River Lark Prickwillow (2 rafts).

Upper Cam catchment Several locations tried on the Bourn Brook, Hoffer Brook, Guilden Brook, Rhee and Cam.

Mink control is also underway along the A14 corridor and at RSPB sites in the Ouse Valley.

Mill River

This project won a 2017 Conservation Award from the Wild Trout Trust. South Cambridgeshire Conservation Consultants continue to plan further river restoration, with advice from the Water for Wildlife project and the Wild Trout Trust. This is now also a riverfly monitoring site, and links will be continued with the project.



Riffle and stepping stones at site of old ford, with lowered banks. Further work has been undertaken and more planned through the Mill River Reserve stretch (total length approx. 2km)

Other activities

- River Cam – collaborating with the Cam Valley Forum’s pennywort control. Led a corporate work party pulling pennywort from punts. If time allows, we aim to make a broader plan for the Cam including habitat enhancements, so that pennywort control would become part of a larger integrated project;
- River invertebrate monitoring – continues on the Cam at Trumpington Meadows, Hoffer Brook and Mill River;
- CamEO – continuing to be a member of this group, contributing to discussions and event planning;
- County Wildlife Sites – further wetland sites were surveyed this year, including Shingay Lake (where white-clawed crayfish are still present) and gravel pit complexes including Middle Fen, Stibbington Pits, Cow Lane gravel pits, Hemingford Grey gravel pits and Hinchingsbrooke Country Park;

- Water quality testing – kits from the “Clean water for wildlife” project have been used to test for phosphates and nitrates at a number of sites, mostly in the Bourn catchment and at the Riverfly survey sites;
- Chair of MLC Internal Drainage Board Conservation Committee meeting; attended MLC Conservation Committee;
- Advised on content of new Wildlife Trust water safety course;
- Attended Floodplain Meadows conference, York;
- Continuing to comment on Environment Agency and other consultations.