

Middle Level Commissioners Meeting 03/11/11

Environmental Officer's Report – April 2011 to October 2011

The Middle Level Otter Recovery Project

The SITA funded element of the project was completed and a payment of £24,000 received making a total of £52,000 received from SITA over the three years of the project. 68 otter holts have been constructed on Middle Level channels and IDB drains. The survey of 68 bridges over MLC waterways for otter spraints continues to show a widespread distribution in the system with 50% having positive signs. The indications are, based on the freshness of the signs, that otters are distributed widely but not numerous in the Middle Level waterways.

A female otter with a near-adult young was recorded on an internal video camera visiting a holt at the south end of the Sixteen Foot River on 4th March. This was the first confirmation of breeding otters the holt cameras have recorded on MLC waterways. The video and other clips can be viewed via a link on the MLC web site, www.middlelevel.gov.uk. Unfortunately, a few weeks later a female otter was found dead beside the Sixteen Foot near Stonea railway bridge with traffic collision injuries. It was sent to the EA for post mortem. Road traffic accidents remain the commonest reported cause of mortality of otters.

The Middle Level Water Vole Support Project

Bank protection and water vole habitat creation

The 399 meters of pre-established coir roll revetment at nine sites created during the two previous years have continued to thrive. Vegetation at the three earliest installations has become established in front of the coir rolls, consolidating the installed material and providing a naturally regenerating margin at a previously eroded location.



Coir rolls near Bedlam Bridge on the Sixteen Foot River, left, shortly after installation in 2009 and right, August 2011. Bur-reed has established naturally in front of the sedges, rushes and purple loosestrife that are growing out of the coir.

An additional 99 meters of coir roll for water vole habitat creation was installed during May at three further sites on the Old River Nene, Well Creek and the Forty Foot River near Ramsey Forty Foot, funded by an additional contribution to the Water Vole Support Project from the Environment Agency. A further 207 meters of coir rolls will be installed at various locations during the winter with the balance of funds remaining, making a total of 500 meters of coir installed.

Mink Control Scheme

The ML Mink Control Scheme was supported and promoted. 175 traps have been distributed to over 40 people in a position to use them. Over 120 mink have been trapped and a reduction in the signs of mink at scat sites on the Middle Level waterway system has been noted. To cover gaps in trapper distribution, a continuous period of trapping on three roadside waterways to achieve a more complete coverage was carried out in spring 2011 using the contracted services of a local expert, Peter Carter. This was very successful and 43 mink, (28 males, 15 females), were trapped over a 31 day period, taking typically 2.5 hours per day. As in previous years, the scheme was publicised at the Fenland Country Fair in August.

Water Vole Survey

During the autumn of 2010 the network of 207 water vole indicator boards positioned at half-mile intervals throughout the Middle Level waterways had been repaired or replaced as necessary to be ready to monitor water vole distribution in the spring.



Water vole populations are showing signs of increase at many Middle Level locations.

The survey of the boards during spring and summer 2011 revealed that there had been a significant increase in the distribution of water voles along the 120 miles of waterways. 41 out of 113 viable boards had signs of use by water voles, (36%), compared with 19 positive out of 129 viable boards at the beginning of the project, (15%). This shows that water voles are returning to their former habitats on the main waterways of the Middle Level system.

Middle Level Water Vole Support Project Funding

A payment of £16,143 was claimed for and received from Biffaward for work carried out. A further 207 meters of coir rolls will be installed with the balance of £4,456 funds remaining, bringing the total of Biffaward funding for the project to £49,960 plus £5,000 from the Environment Agency and £3,000 from the Cambridgeshire and Peterborough Biodiversity Partnership.

Sedge Plugs Planting

MLC Engineers continued the trial of this low-cost method of establishing natural bank protection by having a newly-profiled bank toe planted in March and Whittlesey IDB. Sedge plugs planted elsewhere on Middle Level waterways in previous years continue to make progress but their growth rate is slow compared to the pre-established sedges in the coir roll sites. Coir roll revetment may be more appropriate for use in the more demanding sites on larger waterways. Sedge plugs may be more suitable for re-profiled IDB drains.

Well Creek Water Margins Project

The regular, early cutting of the water margin of Well Creek at Upwell and Outwell is already showing signs of changing the dominant reed sweetgrass, *Glyceria maxima* to a more diverse and

less invasive plant community. More signs of water vole activity have been observed and from April 2011 onwards the method was extended further through Outwell village to the Aqueduct.

Badger Management

A licence to fit no-return doors at the location where badgers had established 16 holes at the back of the Black Ham near Bradford's Bridge was obtained and exercised. No attempts to burrow back into the site were attempted by badgers during the exclusion period. When the sett holes were opened up, extensive tunnelling throughout the bank was found as it had no clay core. A clay core was puddled in and link mesh fence wire installed to prevent re-excavation at the site.



Left, the whole bank was rebuilt as badger holes had extended across it. Right, link mesh is pegged down prior to being covered with a thin layer of soil to prevent returns.

Early action is key in containing badger activity. Waterway users are being asked for their assistance in reporting any early signs of badger activity that they may become aware of in flood banks to the MLC.

Invasive Water Fern Spread

Middle Level drains and ditches do not suffer extensively from invasive non-native water plants, apart from Water Fern, *Azolla filiculoides*. This floating North American water plant has a remarkable reproduction capacity and is able to expand exponentially until it completely blankets channels, cutting out light completely. It has been confined to a handful of locations until recently but 2011 is proving to be a bad year for it, not just in this catchment but in many other locations in the country.

It is hard to control by mechanical methods or by herbicide but fortunately there is a host-specific weevil, *Stenopelmus rufinasus*, that eats it, and only it. It is possible to purchase batches of the weevil and release them on it as a control agent.



*Water Fern, *Azolla filiculoides*, covering a drain. Initially it looks green and can be mistaken for duck weed.*



A closer view shows the distinctive structure of the plant and its tendency to turn pinkish red.

The weevil also expands its population exponentially but it takes time to get the upper hand, two to three months, so it needs to be introduced as soon as possible in the season.

Trials of Azolla control were started with the weevil in Hundred of Wisbech IDB in 2011. Initial results look promising but conditions appear to have been very favourable for Azolla growth so further purchase and distribution of the weevil may be required in other Districts and the Middle Level waterways early in 2012 if the Azolla coverage expands.

IDB Biodiversity Action Plan Support and Implementation

BAP reports were completed for all the IDBs in the Middle Level BAP Partnership. The completion of 31 otter holts within IDB districts, (exceeding the target of 11), was the primary achievement during the first year of the plans. During the autumn and winter of 2011 -12 the focus will be on installing bat boxes, barn owl boxes and drilling holes for kingfisher sites.

The Drainage Board Conservation Group met on 8th June 2011. Its membership has been expanded to provide more support and representation for IDBs and their BAP responsibilities. The meeting of group members will be annually in June and the general meeting of District Officers, Chairmen, Vice Chairmen and any other interested board members will be in early December, as last year.

An IDB Biodiversity Manual for Middle Level IDBs is in the process of production. It provides guidance on carrying out the actions in the IDB BAPs and puts forward projects that will improve diversity for wildlife without inhibiting IDB management. A draft is being circulated internally before wider circulation for comment. The aim is to have the completed version of the manual available for the morning meeting of IDB District Officers and Chairmen on the 7th December at the Oliver Cromwell Hotel, March.

Elver Passes

Plans are in place for the installation of the elver pass at St Germans Pumping Station and discussions are in progress with the Environment Agency with regard to installing an elver pass at Salter's Lode locks as part of the requirements of the Eels Regulations and the Water Framework Directive.

Planning Consent Advice

Biodiversity impact advice was given on a number of planning consent applications. A significant one concerned the Cambridgeshire County Councils application to strengthen and lower the A142 bridge over a Sutton and Mepal IDB drain near Hiam's Farm. Checks showed signs of otter use along the drain so mitigation in the form of an underpass tunnel for otters was agreed with the CCC engineers. Bats and breeding kingfishers were also found to be present under the bridge and appropriate mitigations agreed for them.

Cliff Carson
Environmental Officer
17/10/11