MIDSOMER NORTON TOWN CENTRE - RIVER WILDLIFE

The Town Council has now commissioned three surveys of the River Somer in the town centre since 2011, by Luke Kosak of Woodland, Water & Gardens since – an expert in river management. His most recent report in May 2014 concluded:

"Overall, the range of wildlife sustained within this isolated stream reach in a bustling town centre is quite remarkable, as described in the following sections. The pair of photos on the front cover of our report is a timely reminder of the dearth of life and visual interest in general in this entire reach prior to restoration. This contrast serves to emphasise the extent of the ecological burgeoning since."

In is interesting to review just how much life there now is in the river Somer in the town centre.

Fish - During the latest survey, a passer-by opposed to the restoration of the stream challenged the River Team on the grounds that prior to the project, the stream had supported a thriving population of large brown trout. In fact, during the first site assessment carried out in 2010, a thorough survey identified only stocked (not wild) brown trout, which took refuge under the war memorial. The only other fish species present at the time was three-spined stickleback, a species which is currently thriving in their improved habitat.

That first report stated that a clear indicator of project success would be the establishment of a self-sustaining population of bullhead: the findings of all three maintenance and assessment visits demonstrate that this has certainly transpired.

Bullhead resting on silt in the lower project reach 13

3 spined stickleback – abundant throughout the reach

Aquatic invertebrates - Whilst prior to the river restoration the deep silt deposits supported only very low numbers of freshwater shrimp (Gamarus pulex) the picture today is very different with an abundance and species diversity in the invertebrate community.

Various species are evident including caddis fly (differentiated by the design of their tubular cases), mayfly, crustacean (e.g. shrimp), mollusc and many other invertebrate groups resembles that of a pristine section of the River Somer.

This species diversity is not just an indication of the improvement in water quality following the removal of around 100 cubic metres of sludge but also a reflection of the highly varied range of physical habitats now available in the reach. This is because these creatures require a wide range of micro-habitats and employ an equally wide range of feeding methods in order to thrive. Some dwell in recesses under stones in slack water, some cling to stones in the fastest, most turbulent water; some use tiny webs to intercept passing plankton, while others graze on fragments of decaying leaves; others are specialised predators of other invertebrates. 14

Caddis fly larvae in a case of stone particles

Caddis fly larvae in a case of sand grains

Caseless caddis fly larvae

Mayfly nymph

Aquatic snail egg masses on underside of stone

Birds – The most commonly sighted birds on the river currently are three mallards: a duck and drake and their single surviving duckling, from an original brood of ten. The question raised by passers-by is generally: did the otter get them, or did rats?

A great deal of reliable literature, scientific (mostly related to impacts of non-native rats introduced onto islands) and non-scientific (e.g. poultry keeping manuals), provides evidence that both species predate on ducklings. Otters are also known to predate on fully grown mallards, whilst rats show a preference for duck eggs and very young ducklings.

One idea being considered by the River Management Team is to remove the duck eggs and incubate them and then return them with their mother when they stronger to the River.

Mammals - Otters enjoy the highest level of legal protection in Europe, a status that largely reflects their near-extinction across most of the continent in recent decades as a result of pesticide use, habitat destruction and hunting. That the restored river reach in Midsomer Norton appears to be regularly visited by otters and is marked as a defended territory is a minor miracle which the town can be very proud of.

The evidence for their presence is in the form of several eye witness accounts and the presence of two relatively fresh otter spraints (territory marking droppings) on rocks at the edge of the stream. In the photo below, fish scales and bones can be seen (otters are primarily piscivorous, preferring eels but also taking trout, coarse fish and even bullhead).

Otter spraint containing fish scales

Bees and Terrestrial invertebrates - A facet of the river restoration that was little mentioned at the design stage and easily passes under the radar currently is the benefit that the project has brought for terrestrial invertebrates, especially bees, butterflies, moths, beetles and spiders

The abundance and variety of flowering plants in the project reach is clearly a great local benefit to these creatures and the extensive high-quality invertebrate habitat provided by the vegetated berms in the project reach must be given due recognition. It would be a great advantage to have a terrestrial "audit" conducted by specialist and to seek the opinion of Buglife UK (the major invertebrate conservation charity) on the benefits of the project.

Wolf spider on stone berm