

# Graveley Pond Restoration 2003

## 1. Background:

Concerns were expressed over state of the pond, water quality, algae and welfare of the fish:



A feasibility study was undertaken – an analysis of water quality and silt content was carried out by professional pond ecologists, Symbio: this revealed large quantities of silt with high organic content. The only significant contaminant was zinc (probably from road run off). The paucity of aquatic life, other than fish, was confirmed by this analysis.

## 2. Aims of the pond restoration

- Reduction of the fish population in the large pond and restocking with more appropriate species (Tench, Rudd, Perch)
- Removal of fish from the small pond and allow natural conversion to an amphibian pond
- Removal of silt from both ponds to improve water depth and quality
- Planting of common English aquatic and marginal species around the periphery of the ponds to improve appearance and water quality, and to create beneficial habitat for other aquatic and related species
- Acknowledge funding bodies

## 3. Work carried out:

**Removal of fish:** Keith Wesley was the aquatic expert for the project. Fish were removed by electrofishing at the end of August 2003. Three sweeps were made around the edges of the pond to catch fish sheltering by the bank and a net was then run around the edge of the pond and progressively shortened to confine the fish. About 1600 fish were removed from the large pond, 300 from the small pond.



**De-silting of ponds and rubbish removal:** Work to drain and de-silt the ponds started on October 6<sup>th</sup> 2003 under the supervision of the contractor Shanks. Water was pumped from the small to the large pond. Silt depth in the small pond was considerable (1-1.5 metres), showing how little water depth had been present. Using the large pond as a reservoir, water under pressure was pumped to a hose to create a slurry which could then be sucked into tankers for removal and spreading on local fields. The rubbish removed from the small pond, which filled a 6cu yard skip, indicated that this pond had been used as a village dump and had not been emptied for at least 100 years! The small pond took 2.5 days to complete.



The large pond had been previously de-silted in the 1960s. Before fully draining, a further electrofish was carried out which removed another 500 fish. Water was then pumped into the small pond to use as a reservoir to supply the hose to liquefy the silt. The depth of silt was 1.5 metres in places. For both ponds a total of 39 loads of 18 tonnes and 2 loads of 25 tonnes of slurry was removed for spreading. Villagers volunteered to help remove rubbish from the pond into skips.



**Planting-up:** coir rolls planted up with yellow flag iris, various sedges and other native marginal species were donated by The Environment Agency (EA). Keith Wesley supervised the planting of these. About 90 metres of coir roll were positioned around the edges of the large and small ponds on 'shelves' created from the brick rubble gathered from the base of the large pond. Extra yellow flag irises were planted in some areas, donated by the EA. A small reed bed was constructed in one corner of the large pond where an inlet pipe deposits water to help clean in-coming water.



**Refilling:** the large pond was filled from a stand pipe under licence from Three Valleys Water. The small pond was allowed to fill naturally from rain water and was full by mid-November 2003.

**Fish restocking in the large pond:** fish were restocked on November 21<sup>st</sup> 2003 by Keith Wesley who donated all fish to the project. One original 'ghost' Koi Carp (aka Stumpy) was returned (and can still be seen swimming around today). Tench, Rudd and Gudgeon were added.

#### **4. Acknowledgements:**

Phil Lumley, a Graveley resident who led this project, Graveley villagers who helped with the work, and advice and assistance from Countryside Management Services. Funding was kindly provided by Graveley Parish Council, North Herts District Council, Groundwork Hertfordshire, and donations as described above were received from Keith Wesley and the Environment Agency. Thanks to everyone who contributed to this project.

#### **5. Graveley pond today, 2016**

Following a vote in the village in 2007 there was a large majority in favour of the pond being maintained as a wildlife pond and fishing was banned. Today the pond is a beautiful feature of the village, enjoyed by residents and visitors. Mallard ducks and moorhens breed each year, the yellow flag iris flower in early summer. Swallows and house martins swoop over the water, and damsel flies and dragonflies can be seen over the water and marginal vegetation during the summer months. A heron is a regular visitor, sometimes sitting on the 'No Fishing' sign. Adults and children enjoy looking down into the water to watch the fish and the other wildlife that thrives in the pond.



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