

Bishop Hall Mill Pond

The Remediation Project

Over the years, Bishop Hall Mill Pond has become overgrown with vegetation which has restricted views across the pond and access into the area. The pond has also become filled with silt. The silting and overgrown vegetation has resulted in a neglected and derelict character. However, the pond has significant potential as an ecological and recreational resource. In recognition of this, Anglia Ruskin University has undertaken a remediation project to environmentally improve the pond and surroundings. The environmental improvements resulting from the remediation are as follows:

1. Removal of overgrown vegetation;
2. Dredging of the silt to restore the capacity of the pond and create a stepped pond profile providing habitats for a range of species;
3. Incorporation of new paths to provide improved access and viewing points;
4. Creation of new seating areas;
5. Replanting of vegetation including plants with a variety of ecological benefits.

Ecology

The site is part of the Chelmer Valley Riverside County Wildlife Site. It comprises limited open water with some aquatic vegetation and is surrounded by dense marginal vegetation and some mature trees (including 12 TPOs). It is hoped that the remediation works will create an improved habitat for the following species:

1. White-clawed crayfish - The Environment Agency has records of the species within 2.5km of the site;
2. Great crested newts - The extensive beds of watercress and other leafy vegetation within the pond are ideal material for great crested newts;
3. Reptiles - the habitats that surround the pond are suitable for foraging, resting and hibernating reptiles.
4. Water vole
5. Bats - Previous surveys have identified no evidence of bats using the site although the water body and adjacent retained trees would be attractive to foraging bats.



White-clawed Crayfish



Great Crested Newt

Contamination

The outfall of the roads adjacent to the pond have deposited elevated concentrations of hydrocarbons. These are to be removed as part of the dredging process and treated off-site prior to potential re-use or deposit at land fill.



Planting

Due to the overgrown nature of the pond, selected vegetation has been removed. In addition the project aims to introduce new planting, which is to include the following:

1. Retain existing aquatic and emergent vegetation;
2. Retain existing shrub vegetation; Selected species identified for these areas include:
3. *Symphoricarpos albus* 'Snowberry'
Buddleja davidii 'butterfly bush'
Liriope muscari 'Big Blue'
Dryopteris filix-mas
4. *Cornus alba* 'Spaethii'
Ilex aquifolium
Mahonia aquifolium
Viburnum bodnantense 'Dawn'
5. *Dryopteris filix-mas*
Geranium phaeum
Liriope muscari 'Big Blue'
Helleborus 'Ashdown Hybrids'
Brunnera macrophylla
6. *Crataegus monogyna*
Ilex aquifolium
Sambucus nigra
7. *Carex riparia*
Iris pseudacorus
Sparganium erectus
Myosotis scoriodes
8. *Lavandula* sp.
Hedera Helix
Liriope muscari 'Big Blue'
Lonicera japonica



Symphoricarpos albus 'Snowberry'



Liriope muscari 'Big Blue'



Dryopteris filix-mas



Helleborus 'Ashdown Hybrids'



Iris pseudacorus

Hard Materials

Hard materials will be used to create safe and accessible routes through the site. Golden amber bound gravel will be used as a paving material for the paths; added visual interest will be incorporated through the use of granite setts.

1. Stone and plant filled gabion blocks incorporating wooden seating. The view-points are framed by 1metre high L-shaped gabion walls. These are filled with stone and topsoil for planting. L-shaped seats on the gabion walls allow for views and resting;



2. Bound gravel path;



3. Recycled plastic deck;



4. Granite setts and slab paving.



5. New timber steps