

River Mel Enhancement Project, Meldreth

Technique: Faggots & coir rolls, importing gravel, flow deflectors

Project location: River Mel, Meldreth

River: Mel

County: Cambridgeshire

Project start date: March 2007

Project end date: ongoing

Length: 500m

Cost: £10,000

Upstream grid reference: TL378458



A slow flowing, straight section of the river Mel prior to restoration

Site background

The River Mel is a lowland chalk stream flowing through a mix of agricultural land and local gardens. Much of the river has been subjected to a range of maintenance measures by landowners and the Environment Agency (formerly the National Rivers Authority), including the removal of woody debris and silt in order to reduce the frequency of flood events. Subsequently the river has become over-wide and over-deep, and has suffered from sluggish flows. There were signs that the river was naturally adjusting, but any adjustment was likely to have taken many years without some intervention. Following a site inspection undertaken by the River Restoration Centre, a series of recommendations to enhance the river were made in April 2006.



Narrowed section, showing marginal vegetation colonisation

Objectives

- To narrow the river to a more natural width, and create in-channel flow variation.
- To improve the river's habitat quality, creating a river that is diverse both physically and biologically.

Design

The river works were undertaken by the local community group the River Mel Restoration Group (RMRG).

- Willow brushings were installed along sections of the river, including the reach where wooden bank revetments were constructed in 2000.
- Upstream of the bridge, the river was narrowed using faggot bundles and planted with sedge.
- Vegetation clearing took place to reduce shade and enable more natural light to enter the channel, encouraging in-channel vegetation growth.
- A V-groyne flow deflector was installed, to create flow variation and encourage scour and deposition of silt. Further works are planned.



V-groyne constructed to create flow variation within the channel

Subsequent performance - RRC's views (2008)

The work undertaken has helped restore the river to a more natural width. However, the willow has begun to degrade, perhaps due to the presence of freshwater shrimp. Due to difficulties in agreeing sufficient tree management, some sections of the river are over-shaded, and vegetation colonisation has been limited. Some marginal vegetation has colonised well in the narrowed reaches. This project is an example of what can be achieved by working with the community with a limited budget. The RMRG were awarded winners of the Amateur category at the Wild Trout Trust Awards in 2009.



the River Restoration Centre Case Study Series

This site was last visited by RRC staff on 10th June 2008

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