

Churchill Gardens, Salisbury City Centre

Technique: Enhancing concrete floodwalls

Project location: Salisbury
River: Avon
County: Wiltshire
Project start date: October 2004
Project end date: October 2004
Length: 0.1km
Cost: £2,230
Upstream grid reference: SU 150 293

Original channel, upstream
of the enhancement works.
(Photo: M. de Retuerto)



Site background

The River Avon Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) runs through the heart of Salisbury City Centre. Churchill Gardens is a public park on the southern boundary of the city where the main river passes beneath the busy A338 and the A36 main Southampton Road. A series of artificial, shallow concrete-lined and block-stone sided drainage channels are diverted off of the main river to pass through the public amenity areas acting primarily as a flood relief system and providing drainage for the adjacent roads. With limited cover or habitat for riparian wildlife the channel offers poor biodiversity value and little aesthetic appeal to the public.

Objectives

To 'soften' the banks of the artificial channel and provide cover and habitat for fish, invertebrates; to improve the aesthetic and floristic value of an urban watercourse running through one of Salisbury's public parks; to engage volunteers in river habitat enhancement work.

Design

100m of artificial drainage channel was enhancement for wildlife by:

- Pre-planted coir rolls used to soften the edges of the block-stone walls, providing marginal habitat for wildlife and improved aesthetic value of the channel. Once the flora has established these will provide vastly improved cover for fish and invertebrates, as well as improving the connectivity of the channel as a wildlife corridor. Coir rolls were secured in place using chestnut stakes and wire.
- Works were undertaken by volunteers living within the Salisbury area.



Well established plants within coir rolls totally hiding the hard edge. (Photo: M. Janes)

Subsequent Performance - RRC's views (2005)

The vegetation within pre-planted coir rolls have quickly covered the unsightly bank. To the casual eye, there is little to suggest that there is a formal hard edge between the bank and the reedy fringe. The test over the next few years will be the ability of the vegetation to bind into the gravel bed and the silt depositing within the vegetation mass. If this is not successful, the plants may lack a solid base to anchor themselves once the coir rots away. In the unshaded sections (photo above) the root mass achieved may be sufficient, however where tree shading is restricting growth, this may be a problem. A solution might be to loosen/remove stones from the low wall to allow marginal roots to bind into the terrestrial edge.



the River Restoration Centre Case Study Series

This site was last visited by RRC staff in August 2005

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