

Habitat Advisory Visit

River Test – Fulling Mill Beat

Whitchurch

On behalf of the Mr & Mrs Gallagher

July 2006

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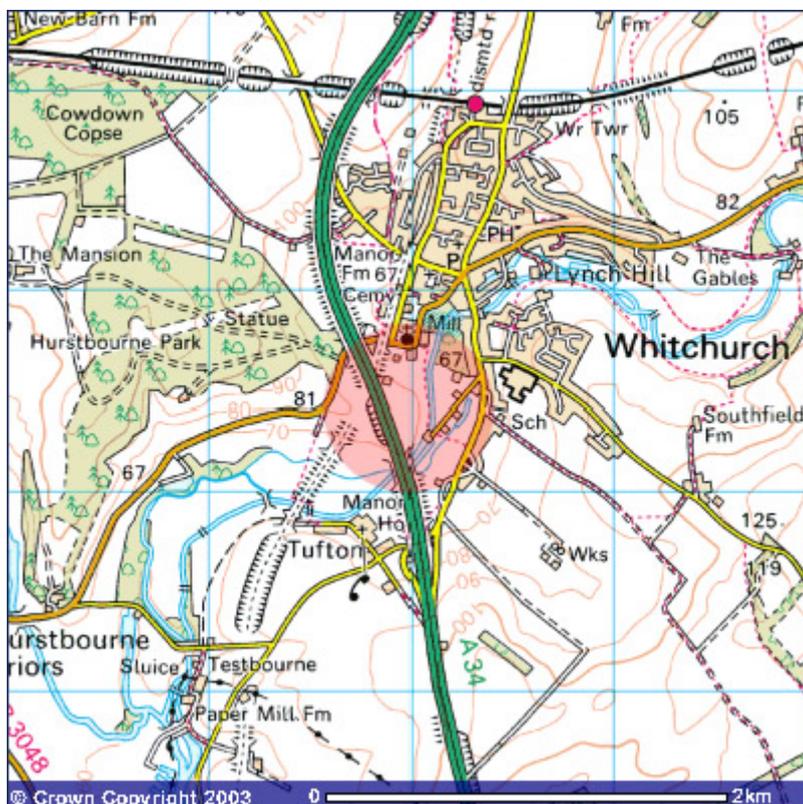
1.0 Introduction

This report is the output of a site visit undertaken by the Wild Trout Trust on the River Test, Fulling Mill Beat, Near Whitchurch, Hampshire on 6th July 2006.

Comments in this report are based on observations on the afternoon of the site visit and discussions with Mr Chas House (keeper) and Mrs Gallagher (owner).

Normal convention is applied throughout the report with respect to bank identification, i.e., the banks are designated left hand bank (LHB) or right hand bank (RHB) whilst looking downstream.

2.0 Fishery Overview



The Fulling Mill Beat of the Test comprises approximately 1km of single and double bank fishing. The fishing is let to day rods through an agent. The reach stocked with 150 browns per annum and is divided into two sections by Fulling Mill. There are wild trout present. The visit was undertaken in very low water conditions.

This report will focus on the 0.5km section u/s of Fulling Mill.

3.0 Fishery Habitat Description

The 500m section u/s of Fulling Mill is characterised by being over-wide and shallow. Due to low flow conditions water crowfoot was almost absent, with only a sparse growth of Starwort present. There is a moderate growth of Marestail, which is facilitating silt deposition and some limited narrowing.

The mill structure has a 'back-watering' effect on for the first 150m u/s after which there is a fairly good flow regime. If left un-managed, the trees along this reach may eventually cause problems of over-shading. Over-shading can inhibit the growth of in-river macrophytes and can also suppress bankside vegetation, the roots of which are a natural defence against erosion. It is recommended that management of trees be undertaken on a 'little and often' basis.



Picture 1) Immediately u/s of Fulling Mill – Note potential over-shading and the over-wide nature of this reach.

There is a public footpath on the RHB running from the top of the section down to the mill. The bank on the RHB is eroding and provides very little in the way of emergent and fringing vegetation. In many places the vegetated margin is less than 2 metres wide. English Nature has classified the RHB as being in 'un-favourable' condition. There are draft plans in place to restore the banks and narrow this section of river. During the AV only a brief inspection of the Land Drainage Consent was possible. The LHB comprises fen type habitat comprising reed, willow, alder and sallow. This may form a land parcel of the Test SSSI. Current low flows may be having a detrimental effect on fen plant communities due to a lower water table.



Picture 2) Looking u/s of Fulling Mill.

Several faggot deflectors and mid-channel islands have been recently installed. In places they are encouraging silt deposition that will, over time, encourage the river to narrow itself and improve localised flow velocities. Overall there is a severe lack of pool habitat, a fact made worse by the very low flows and absence of water crowfoot to retain water levels. The lack of fringing vegetation on the RHB means there is very little cover afforded to 'swim-up fry' as they emerge from spawning gravels. The faggot deflectors could be better placed by being set upstream facing and approximately 30-40 degrees to the bank to encourage over-topping winter flows into the centre of the channel. The current 90-degree setting may cause some back-eddying and lead to localised erosion.



Picture 3) recently installed 'faggot Island'



Picture 4) – Recently installed paired faggot deflectors. Note silt deposition and scoured gravel d/s of faggots. Note 90-degree position.

4.0 Recommendations

It is a legal requirement that all the works to the river and /or the on-line lake require written Environment Agency consent prior to undertaking any works, either in-channel or within 8 metres of the bank.

Local EA Fisheries and Development Control staff should be contacted at the earliest opportunity to discuss any recommendations arising from this report the fishery may wish to pursue.

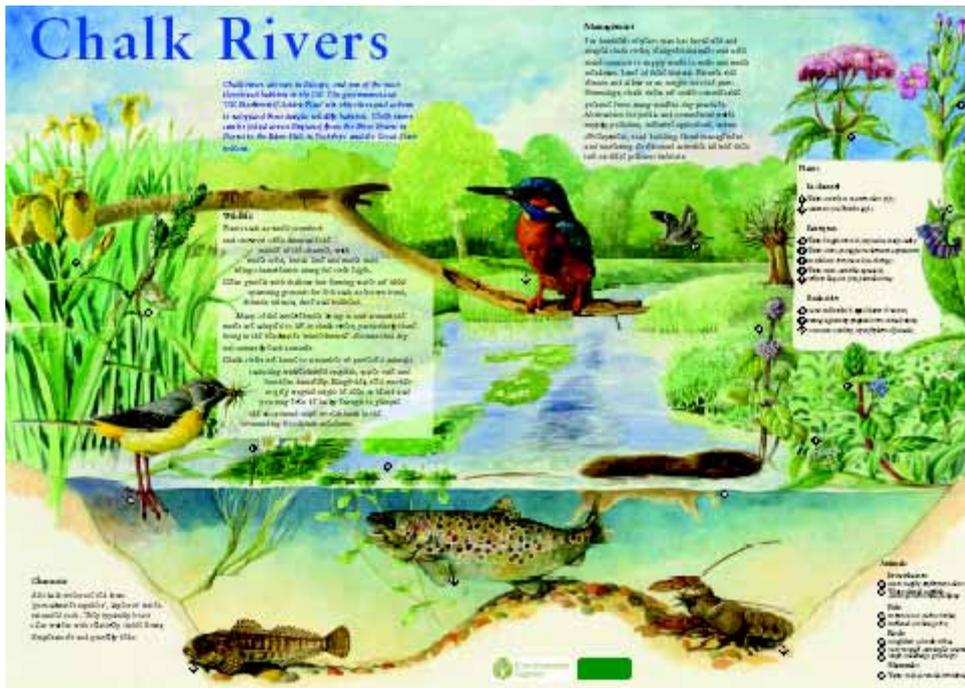
References will be made to the Wild Trout Survival Guide (WTSG) a copy of which was supplied on the day of the visit.

In this over-wide section a new bank line should be created using brushwood faggots staked along the RHB¹. As a rough guide narrowing should be at least 4m to achieve improvements in flow velocity and channel depth. At various points it is also recommended that flows be 'pinched' by installing paired and single faggot deflectors to allow the river to scour pool habitat². Backfill for these features can be sourced from local chalk pits or using arisings from any tree works on-site. The new bank should be set no more than 10cm above summer water level to allow the development of emergent wetland plants such as sedge, water forget-me-not, brooklime, yellow flag-iris and water mint, etc. Consideration should be given to transplanting well-established emergent vegetation from adjacent areas to facilitate the colonisation process. A density of four plants per square metre should achieve rapid results.

This habitat is particularly important for grey wagtails, reed warblers, southern damselfly and water voles, (which are known to forage along wet vegetated berms). Fringing vegetation will also provide cover for trout fry on emergence from spawning gravels. The newly restored bank and wet-berm may need to be protected using temporary fencing to allow plants to colonise and stabilise unconsolidated materials. There are issues related to the footpath and a temporary diversion into the adjoining paddock may be a short-term solution to maintaining current levels of public access. A series of interpretation boards could also be installed along the reach to inform the public about the conservation benefits that the project will deliver.

¹ See WTSG page 42

² See WTSG page 44



Example of an interpretation 'Chalk Rivers' interpretation board

Woody debris³ in rivers can provide habitat for a variety of animals. Brown trout numbers increase significantly with the presence of woody debris along the banks and in the river as they provide refuge and cover. They may offer lies for otters or perches for kingfishers. Woody debris in the river may also create pools and riffles in sections of the river that would otherwise have a dearth of aquatic habitats. They also retain leaf litter and act as an energy reservoir for the river section.

Fallen timber can be used to create flow deflectors. Deflectors need to be; 1) keyed into the bank to avoid localised erosion and; 2) staked and wired to the bed of the river to avoid being washed-away. During winter flows the deflectors will scour out pools and naturally sort and clean gravels suitable for trout spawning. As a very rough guide deflectors should be set at approximately 30 degrees to the bank with a length of between 40-50% of channel width, or staked in mid channel as paired submerged upstream facing logs. Deflectors keyed in from the bank should be set just at summer water level. Scour pools have been shown to be very important habitat for all life stages of brown trout. Deflectors could be particularly useful if placed silted riffle areas. Pairs of submerged upstream facing logs could be pinned the river bed to scour pool habitat / sort gravels.

³ See WTSG page 39



Picture 5



Picture 6) Installation of new bank using faggots and chalk backfill on the River Wensum, Norfolk



Picture 7) Introduction of single u/s 'natural' deflectors (single, near bank and triangular' far bank) on the Wylde in Wiltshire formed a chicane, sending flow from one bank to another. Note set just above summer water levels.



Picture 8) Installation of these upstream facing 'paired logs' has created valuable mid-channel pool habitat.

6.0 Disclaimer

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