



**HABITAT ADVISORY VISIT
RIVER DEVER HAMPSHIRE
UNDERTAKEN BY VAUGHAN
LEWIS, WINDRUSH AEC ON
BEHALF OF SIMON CLARK.
MAY 2006**

**PART OF THE CINDERELLA CHALKSTREAMS PROJECT, JOINTLY
FUNDED BY THE ENVIRONMENT AGENCY AND ENGLISH NATURE**

1.0 Introduction

This report is the output of a Wild Trout Trust Advisory visit undertaken by Vaughan Lewis, Windrush AEC to the River Dever, Bransbury, Hampshire on 1st June 2006. The visit was provided under the WTT's Cinderella Chalkstreams project, jointly supported by the Environment Agency and English Nature.

Comments in the report are based on observations on the day of the site visit, and discussions with the landowner, Simon Clark. Throughout the report, normal convention is followed with respect to bank identification i.e. banks are designated Left Bank (LB) or Right Bank (RB) whilst looking downstream.

2.0 Habitat Assessment

The fishery comprised some 250m of the River Dever at Bransbury. The Dever is a small chalkstream tributary of the River Test. It displayed all the key characteristics of a chalk river, with excellent water clarity, relatively constant flows and a wide diversity of aquatic vegetation.

The downstream limit of the fishery was at Bransbury roadbridge. Immediately upstream, the channel was some 15m wide, with the water depth varying between 15cm and 75cm. The substrate was dominated by poorly sorted gravel and small flint cobbles, providing potentially excellent spawning for brown trout *Salmo trutta*, grayling *Thymallus thymallus* and potentially, Atlantic salmon *Salmo salar*. The bed throughout the fishery was relatively uniform, with limited sections of deeper water restricting habitat for adult fish.

There was a strong growth of mixed submerged vegetation including starwort *Callitriche* Spp., water crowfoot *Ranunculus* spp and water forget me not *Myosotis scorpioides*. The weed growth was less vigorous in sections of the river partially shaded by deciduous tree growth on both banks. Most of the shade was cast by the LB (south) trees, with those on the RB providing valuable low level cover.



Wide, partially shaded section of channel

The middle section of the fishery had a more open LB, with the RB dominated by fringing deciduous trees. Attempts had been made in the past to protect the LB from erosion using a combination of artificial membranes and vertically driven wooden stakes. These had partially collapsed, with some loss of the bank line resulting. Present management of the LB comprised regular cutting to produce a uniform grass dominated sward. There was very little marginal vegetation present along this section.



Middle section of the fishery showing less shaded LB and RB tree cover

The LB of the upper section of the fishery had a concrete edge, with a sheer vertical face and no associated marginal vegetation.



Concrete revetted bank of the upper section of channel

3.0 Fish stocks

There were good stocks of both brown trout and grayling visible in the river. Whilst the presence of significant numbers of small trout suggested that some recruitment had taken place in or adjacent to the reach, the very large individual specimens noted may well have originated from the commercial fishery located a short distance upstream.

4.0 Recommendations

As a result of the advisory visit, a number of recommendations are made for the future management of the fishery:

- The downstream section of the fishery was slightly overshadowed, reducing the growth of instream plants. A careful regime of selective coppicing/pollarding undertaken could be used to partially open up the channel, and reduce shading locally. Care should be taken only to coppice/pollard small sections of the bankside trees, with more cutting undertaken in successive years. In addition to reducing shading, this will create a mosaic of uneven aged trees on the bank and dappled shade across the channel.
- The arisings from the tree trimming should be used to create faggots, roughly 2m long with a diameter of approximately 300mm. Once manufactured, the faggots could be used to reform a new edge to the river in the overwide downstream section. The channel should be narrowed locally by 1-3m (use the line of deposited silt as a guide to the exact width of the new channel) using the faggots. They should be pinned in place using wooden stakes and backfilled with secured brushings, overtopped with cut sods of sedge *Carex* spp., reed canary grass *Phalaris arundinacea* or yellow flag *Iris pseudacorus* obtained locally. These will help to promote rapid development of a protective marginal vegetation fringe. The top of the faggots should be set at approximately 100-150mm above mean summer water level. The faggot bundles could also be utilised to provide a 'soft', more natural edge to the concrete bank protection along the middle and upper section of the fishery. These sections of the fishery should be narrowed by no more than 1m. Whilst undertaking this work, it would be valuable to infill the holes in the bank behind the concrete, to prevent further erosion taking place in the future.
- The present regime of grass cutting should be modified along the whole reach in order to allow the development of a strong and erosion resistant fringe of vegetation, promoting linkage with the installed faggot revetment.
- There was a general paucity of deeper water habitat suitable for adult fish. As a consequence, much of the fishery was devoid of larger fish, that tended to congregate under overhanging trees on the RB. Additional adult habitat could be created by the use of upstream facing wooden deflectors that create scour and encourage the development of deeper water. These are easily constructed from lengths of timber arising from coppicing. The timber should be of between 15-20cm in diameter, and between 1.5m-3m in length. Install the logs on the bed of the river using a combination of stakes and wire.



Upstream facing groynes showing scoured pool downstream

- A regime of cleaning spawning gravels each September should be established. This can be achieved by either manual raking, or by the use of high-pressure water jets. Care must be taken to clean riffles rotationally, with only short sections being treated annually. It is important that the EA are contacted prior to any cleaning of gravel, due to the possible discoloration of water in the river resulting from the operation. The same concerns dictate that downstream neighbours should also be forewarned of the operation.
- It may be possible to establish a mutually beneficial relationship with Sparsholt Agricultural College, Winchester. The college runs a number of fishery management courses to degree level and is often in need of sites on which to teach fishery management skills to students. In return, the expertise of the college lecturers and labour of students would be made available to the landowner. Contact Shaun Leonard on 0162 776441 to discuss.
- Note that all works to bed or banks of the river or within 8m of its banks requires the written consent from the Environment Agency under the Land Drainage legislation. The introduction of any fish or eggs into any inland water requires the consent of the EA under the Salmon and Freshwater Fisheries Act, 1975. It is imperative that all relevant consents are obtained by the club.
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