



**HABITAT ADVISORY VISIT TO THE RIVER  
ITCHEN, CHERITON BISHOP, HAMPSHIRE.**

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PISCATORIAL SOCIETY**

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## **1.0 Introduction**

This report is the output of a site visit undertaken by Vaughan Lewis, Windrush AEC Ltd to the Sussex Piscatorial Society fishery on the River Itchen, Hampshire on 13 December 2005. This visit was sponsored by English Nature.

Comments in the report are based on observations on the day of the site visit, and discussion with club members and Lawrence Talks, Environment Agency (EA). 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 River Itchen is one of the finest examples of chalkstreams in Britain. As such, it has been designated not only as a Site of Special Scientific Interest (SSSI) but also as a Special Area of Conservation (SAC) under EU Habitats Directive. This latter designation recognises its conservation importance in a European wide context.

Sussex Piscatorial Society (SPS) lease the fishing rights on the headwaters of the Itchen for approximately 1km upstream of Cheriton Mill. The perennial head of the river is located some 2km-3km upstream of fishery. As a consequence, flows in the river can be very low during the summer period.

The upper section of the river was heavily grazed by agricultural stock. Consequently, the bankside vegetation was impoverished, with sections of bank poached by the animals' hooves. The channel was overwide, with a heavy burden of fine sediment apparent over much of the bed.



### **Fine sediment coating the river bed – upper river**

Further downstream where the channel was fenced, vegetation growth was well developed, with extensive margins of emergent vegetation constraining the width of the river and maintaining locally high water velocity. As a consequence, there was limited deposition of fine sediment over the gravel dominated bed, with a range of

submerged macrophytes including Water crowfoot *Ranunculus* spp, starwort *Callitriche* Spp. and hemlock water dropwort *Oenanthe* Spp. flourishing.

During low flow periods in the summer, the ecology of the river responds by producing more extensive submerged and emergent macrophyte growth, narrowing the channel and restricting access for fishing.



### **Extensive growth of emergent vegetation narrowing river channel**

Near to the upper limit of the fishery, a small RB channel diverged from the main river, and ran through the water meadows, rejoining the main river downstream of the limit of the club's fishery. This channel had a significant growth of the water crowfoot and other submerged vegetation, along with long sections of silt-free gravel suitable for spawning brown trout. Less welcome was the presence of the alien water fern *Azolla filiculoides*. Considerable stands of this red floating plant were present along the length of the channel.



**Water meadow carrier showing sections of clean gravel, and *Azolla***

Towards the middle of the fishery, the river split, with the LB (high level) channel feeding the old mill, whilst the RB (low level) channel fed the main river. The division of flow between the channels was maintained by an informal arrangement, comprising of small logs.

There was evidence of the past cultivation of watercress, with the presence of a series of flow dividing and training walls in the lower reach of the river.



**Concrete walls constructed as part of historic watercress farming operations**

### **3.0 Fish stocks**

The river has not been stocked in the recent past. Brown trout recruitment at the fishery is strong, with the approximately 100 members of the club operating a policy of 'catch and release' in the fishery. Fish to more than 16" in length have been caught in recent seasons.

### **4.0 Recommendations**

This section of the upper Itchen was a delightful example of a small chalkstream headwater. As such, it has an exceptionally high conservation value that is acknowledged by the angling club. It is very important that angling aspiration is tempered in the light of the river's status. Fishing pressure on this reach of the river must remain light, with minimal, sensitive management undertaken to promote stocks of brown trout and other species of conservation importance.

- There is a desire by the EA to designate the reach upstream of Cheriton Mill as a 'Wild Fisheries Protection Zone' under its National Trout and Grayling Fisheries Strategy. Given the high conservation status of the site and the relatively limited migration of any stocked fish into the site, this seems a logical and laudable step to take. In return, the club should expect the Agency to support the club in its wish to manage the reach as an exemplar of a small chalkstream fishery. This support should be expressed by the Agency both in financial and practical assistance to the club.
- The banks of the unfenced sections of the river were overgrazed, resulting in loss of marginal vegetation and mobilisation of excessive fine sediment into the channel. This impact had seriously damaged instream habitat for spawning and juvenile salmonids, with a resulting decrease in localised recruitment to the fishery. In order to redress the balance, it would be desirable to fence the stream. Given the high conservation status of the fishery, it is likely that temporary electric fencing would be more acceptable than permanent fencing. One other possible solution that has worked on other fisheries is to reduce the density of grazing stock. Some clubs have affected such a change by taking on the grazing rights themselves, thus giving them control of the level of grazing in riparian fields.
- The extensive growth of both bankside and submerged aquatic plants was mentioned by the club as a factor for the limited usage of the fishery by its members during the summer period. Whilst this is undoubtedly a factor influencing angler venue choice, it does not mean that the weed should be removed. On the contrary, the narrowing of the channel as a result of marginal vegetation, and the maintenance of water level by submerged weed, are key elements in supporting riverine ecology during low flow periods. The temptation to cut or remove significant amounts of vegetation should thus be resisted, and anglers should temper their expectations of the fishery during the mid-late summer period. In a limited number of locations, careful and localised hand cutting of submerged vegetation could be used to concentrate the limited flow in order to scour gravel and provide small areas of open water for trout. It must be emphasised that this cutting should be of a very limited nature, with no pulling back of the margins of water forget me not, reed sweet grass and other emergent vegetation attempted.
- Winter cover in the fishery was limited, with only the floating margins of emergent vegetation providing much of a refuge for fish. The presence of heron

*Ardea cinerea* and more recently, little egret *Egretta garzetta* makes the need for winter cover crucial. In order to increase its provision, help sort the substrate and increase the diversity of the bed profile, it is recommended that a significantly increased amount of Large Woody Debris (LWD) should be retained within the fishery. LWD could be obtained by the coppicing of selected riparian trees. This would allow more light to fall on the channel, promoting marginal and instream vegetation growth. Individual tree trunks and large limbs could then be placed and pegged/wired into the channel, creating useful groynes. Finer brush could be tied into faggot bundles (approximately 1.5m x 0.5m) and fixed parallel to the bank. This would be of particular benefit in overwide sections of the river where they will encourage consolidation of the banks, as well as providing habitat for a range of species.

It is important that the EA is made aware of any adopted policy to retain LWD in the channel, in order to prevent its removal during routine management operations undertaken by the Agency.



### **Overgrown crack willow *Salix fragilis* suitable for pollarding**

- Consideration had been given to reducing the flow into the RB water meadow carrier near to the upper limit of the fishery. This is not considered desirable. The channel is an important component of the wetland SSSI that would be likely to suffer if flows into it were to be reduced. Further, the channel appeared to have considerable value as spawning and recruitment area ('nursery stream'), with lengths of unimbedded gravel of a size suitable for trout spawning. The presence of *Azolla* was potentially damaging to the fishery and the SAC. Discussions with English Nature and the EA should be initiated, with a view to tackling the control of this alien species. Control of *Azolla* on the River Lambourn SAC has focussed on the use of biocontrol using an introduced beetle species.



### **Water crowfoot and clean gravel in the water meadow carrier**

- The club had also considered formalising the flow split between the RB and LB channels upstream of the mill by constructing a weir/sluiice. This approach is not recommended. Whilst the present arrangement is a little ‘Heath Robinson’, it does have the merit of being unobtrusive and very flexible. In general, flow should be prioritised down the RB channel in order to offer maximum benefit to the fishery.
- Note that all works to bed or banks of the river or within 8m of its banks require the written consent from the Environment Agency under the Land Drainage legislation. In addition, the SAC status of the river will require the club to obtain permission from English Nature for any works to the river or surrounding land.

### **5.0 Disclaimer**

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