

# WILD TROUT TRUST

River Hooke, Waterside, Hooke, Dorset



An Advisory Visit by Nick Lawrence of the Wild Trout Trust July 2022 <u>nlawrence@wildtrout.org</u>

# Introduction

This report is the output of a visit undertaken by Nick Lawrence of the Wild Trout Trust (WTT) to approximately 150 metres of the River Hooke at Hooke, Dorset. A walkover of the site was requested by the landowner, who is keen to explore opportunities to enhance, conserve and improve the brown trout population.

Comments in this proposal are based on observations made on the day of the visit, and discussions with the landowner and Amanda Broom of the Dorset Wildlife Trust (DWT). 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 and the proposal starts at the most upstream point and works downstream.



Map 1 The reach visited: Hooke, River Hooke

### **Catchment and Fishery Overview**

The River Hooke is a small river in the county of Dorset in southern England. It runs from its source at Toller Whelme through the villages and hamlets of Hooke, Kingcombe, Toller Porcorum and Toller Fratrum to join the River Frome at Maiden Newton, a course of some 6 miles. The river was formerly called the River Toller, hence the name of the three Toller villages. At some point, however, this former name was replaced in use by reference to a particular feature in the river's course: 'Hooke' is a derivation of 'hoc', Old English for 'sharp bend in a stream'.

The River Frome has the reputation of being an excellent chalkstream fishery supporting a good population of wild brown trout and grayling, as well as Atlantic salmon. The river also supports a broad range of coarse fish, as well as key conservation species such as bullhead and brook lamprey.

The Hooke data from the Environment Agency can be viewed at: <u>Hooke</u> <u>Catchment Data Explorer</u> <u>Catchment Data Explorer</u>

Some of the issues impacting the Hooke are linked to poor water quality associated with phosphates from agriculture and point source pollution.

# **Habitat Assessment & Opportunities**



Photo 1 Upper most section visited, the river here exhibits a good gradient and clean graded gravels. Water crowfoot would be expected here as it grows downstream, so some planting of it in well lighted areas could be beneficial. Exemplary management of shaggy overhanging fringes and trees provide high quality habitats for insects and fish.



Photo 2 High quality marginal habitats, providing refuge for insects and fish: 5 trout were sighted within this area.



Photo 3 Small boulder weir is interrupting gravel and fine sediment transport downstream, and increasing bank erosion downstream on the LB. This should be modified to improve in channel habitats. Removing the central stones and rolling them into the edges of the river will improve fish passage, sediment transport and reduce erosion.





Diagrams 1 & 2 show the effects a weir can have on a river, and is relevant to even the small weir at Waterside. More information on weirs can be found at <u>Weirs, barriers and hydropower | Wild Trout</u> Trust.



Photo 4 Looking downstream to a well-shaded channel which aids water temperature regulation in hot periods. The LB has favourable habitat management with trailing vegetation to water level. On the RB (under different ownership) habitat development is impeded by block stone at the bank toe. The block stone would be best removed and replaced with a natural sloping gravel edge or faggot bundles could be installed to aid the establishment of native marginal plants.



Photo 5 Further downstream a wide shallow riffle could provide spawning habitat. It could be diversified further with woody material placed on the LB to increase local bed scour and flow diversity to generate a wider range of micro-habitats.



Photo 6 Another small weir made of wood planks (left of shot) is designed to divert a sweetening flow to an online pond on the RB. The weir should be notched further to improve fish passage and habitat connectivity, whilst still providing flow to the lake.



Photo 7 Nice mature woodland providing good, dappled shade keeping the river cool. The stone wall (RB), (under different ownership), is preventing marginal plant growth and offers no habitat cover for trout. Its impact could be mitigated by the introduction of a gravel bar at the base of the wall. A gravel bar would enable shade tolerant plants (such as pendulous sedge and ferns) to establish.



Photo 8 At the most downstream point visited, the Environment Agency (EA) gauging station <u>River</u> <u>Hooke level at Hooke - GOV.UK (check-for-flooding.service.gov.uk)</u>. The shallow water over the concrete sill prevents, fish passage except in high flows.



Photo 9 Adjacent to the main River Hooke was a small stream that is fed from the main river, which, rejoins at the lower end of the reach. The stream is managed sensitively and provides habitat for a wide array of aquatic invertebrates (as demonstrated by some cursory stone turning).

# Recommendations

- Continue to encourage lush and thick vegetated fringes, ensuring cover for small fish and invertebrates at the river's edge: Avoid strimming bankside plants as this reduces cover for wintering invertebrates.
- Consider translocation of water crowfoot to the fast flowing well-lit areas.
- Notch the centre out of the rock weir and cut a small notch in the wooden planked weir adjacent to the pond.
- Leave fallen trees in the river. If a tree does fall in the water, give it a couple of floods to see how it settles. After this, and only if the tree is problematical (e.g causing a flood risk), consider adjusting it into a more favourable position. If there is concern for it coming loose, then it could be secured with posts and sisal rope or wire so that the ecological benefit is retained.
- Consider installing a new low-toe to the RB against the vertical wall, to enhance the aesthetic and biological quality of the defended bank: The gravel would also provide further protection to the wall against erosion.
- Supplementary planting of attractive native plants such as marsh marigold, purple loosestrife, water forget-me-not, water mint, flowering rush, meadowsweet, hemp agrimony and gypsywort, if not already present, would add extra visual appeal.
- Add some woody material into the channel to create pinch points to help diversify the flow and to initiate bed local bed scour. See example below.
- Speak to the EA to understand if their gauging weir is underperforming, which could mean it is due for removal.



Photo 10 A misshapen piece of woody material, scouring the riverbed and diversifying flows.

# Making It Happen

The creation of any structures within 'Main Rivers' or within 8m of the channel boundary (which may be the top of the floodplain in some cases) normally require a formal Flood Risk Activity Permit from the EA. This enables them to assess possible flood risk, and possible ecological impact. Headwaters and tributaries are generally lower floodrisk areas and are likely to be designated as 'Ordinary Watercourses,' and fall under the jurisdiction of the Lead Local Flood Authority. In any case, contacting the EA early and informally discussing any proposed work is recommended as a means of efficiently processing an application.

The WTT website has a wide range of free materials in video and PDF format on habitat management and improvement, the 'Tree management' and 'Tree kickers' videos are particularly useful in this case.

#### https://www.wildtrout.org/content/how-videos

There is also the possibility that the WTT could help via a Practical Visit (PV). PV's typically comprise a 1-3-day visit where WTT Conservation Officers will complete a demonstration plot on the site to be restored. Recipients will be expected to cover travel and accommodation (if required) and expenses of the WTT attendees. There is currently a big demand for practical assistance and the WTT must prioritise where it can deploy its limited resources. The Trust is always available to provide free advice and help to organisations and landowners, through guidance and linking them up with others that have had experience in improving river habitat.

## Acknowledgement

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## Disclaimer

This report is produced for guidance; no liability or responsibility for any loss or damage can be accepted by the Wild Trout Trust as a result of any other person, company or organisation acting, or refraining from acting, upon guidance made in this report.

Legal permissions must be sought before commencing work on site. These are not limited to landowner permissions but will also involve regulatory authorities such as the Environment Agency – and any other relevant bodies (e.g. Natural England and Forestry Commission) or stakeholders. Alongside permissions, risk assessment and adhering to health and safety legislation and guidance is also an essential component of any interventions or activities in and around your fishery.