



WILD TROUT TRUST

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River Dart – Dart AA Advisory note.



Galaxy S20 FE

Advisory Visit May 2023

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1.0 Introduction

This advisory note is the output of a site visit undertaken in May 2023 by Andy Thomas of the Wild Trout Trust (WTT) and committee members of the Dart Angling Association DAA, to various sections of the River Dart and tributaries.

The request for the visit came from the DAA. Catches of both migratory trout and salmon have drastically declined in recent years and the DAA are currently reviewing their fishery management policy, as well as exploring possible reasons for the decline in Dart fish populations.

The Dart is currently assessed as being in Moderate Ecological condition by the Environment Agency. Further information on reasons for failing to meet Good Condition can be found here:

<https://environment.data.gov.uk/catchment-planning/WaterBody/GB108046008350>

Comments in this report are based on observations made during the site visit and discussions with the club committee members.

Normal convention is applied with respect to bank identification, i.e. left bank (LB) or right bank (RB) whilst looking downstream. Upstream and downstream references are often abbreviated to u/s and d/s, respectively, for convenience. The Ordnance Survey National Grid Reference system is used for identifying specific locations.

Table 1. Overview of the waterbody information sourced from:

River	Dart
Waterbody Name	Dart
Waterbody ID	GB108046008350
Management Catchment	Dart Start bay and Torbay
River Basin District	South West
Current Ecological Quality	Moderate Ecological Status
U/S Grid Ref inspected	Sx74626657
D/S Grid Ref inspected	Sx75296494
Length of river inspected	2km

2.0 Overview

The River Dart has historically supported a vibrant and healthy salmonid fishery, with the DAA members enjoying excellent salmon and sea trout fishing, mainly in the middle and lower reaches, with the river also supporting an excellent brown trout fishery throughout.

In recent years, catches have notably declined and there have been several comparatively new issues that potentially may be impacting Dart fish stocks. These include:

- Additional predation pressures in the reach below Totnes weir from seals.
- Sporadic outbreaks of disease, thought to be Ulcerative Dermal Necrosis UDN, or possibly secondary fungal disease (saprolegnia) impacting mainly sea trout.
- Modifications to Totnes Weir to facilitate a hydro-power scheme.
- Changes to local land use and in particular a move away from valley-side grazing to arable and salad crop production.
- Augmenting stocks with hatchery derived brown trout.
- Point source sewage pollution from poorly performing South West Waters waste water treatment works (WWTW)

The site visit was arranged to provide an opportunity to view the main river and a key spawning tributary, and to discuss issues that might be impacting on fishery performance and review current management actions.

3.0 Assessment

The Dart benefits enormously from the quality of its headwaters, emanating from Dartmoor, a nationally protected site. In theory at least, water quality should be superb and water resources (flow) protected and reasonably reliable, especially given the quantity of natural moorland storage available for what is a spate, rainfed system.

Long tracks of the middle river above Buckfast sit within heavily wooded valleys. Most of the valley appears to be natural deciduous woodland, with some smaller blocks of coniferous forestry on the top of valley ridges. In general, one would conclude the valley above Buckfast to have "river-friendly" land-use. From Buckfast downstream, the wooded corridor is mainly restricted to narrow riparian strips, with the valley floor set aside for mainly pasture and occasional arable meadows.

There was some discussion about changes to land-use to some of the steeply sloping fields on the valley ridges and sides. In recent years a significant number of these meadows have been converted from permanent pasture into crop production (photo1). This change in land use, with finely tilled soils put into rotational organic salad crop production, will be having a profound impact on local hydrology and run-off, with the capacity to significantly add to local agricultural diffuse pollution pressures.



Photo 1. Longitudinal ridge and furrow planting on the top of the valley ridge. Is the soil-rich runoff that can emanate from these fields adequately controlled and intercepted?

In-channel habitat on both the main river sites and the Mardle was considered to be good, despite the fact that long sections of both main river and tributary are heavily modified, with several weir structures (photo 2) and evidence of channel straightening and armoring to accommodate both road and rail.

Despite these modifications, the river still provides a valuable series of deep holding pools, glides and broken riffles, ideal for both spawning and nursery habitat. Long tracks of the bank are naturally defended with the complex root systems of mature alder, ash and oak trees, even where the tree canopy is limited (photo 2).

The cooling shade provided by riparian trees is going to be increasingly valuable in helping to mitigate the negative impacts of climate change.



Photo 2. A shaded deeper run on the left bank provides good holding water for adult fish, with the slow-flowing, shallow margins on the right bank providing opportunities for fry and parr, with a mixed substrate of gravel, cobbles, and larger boulders.

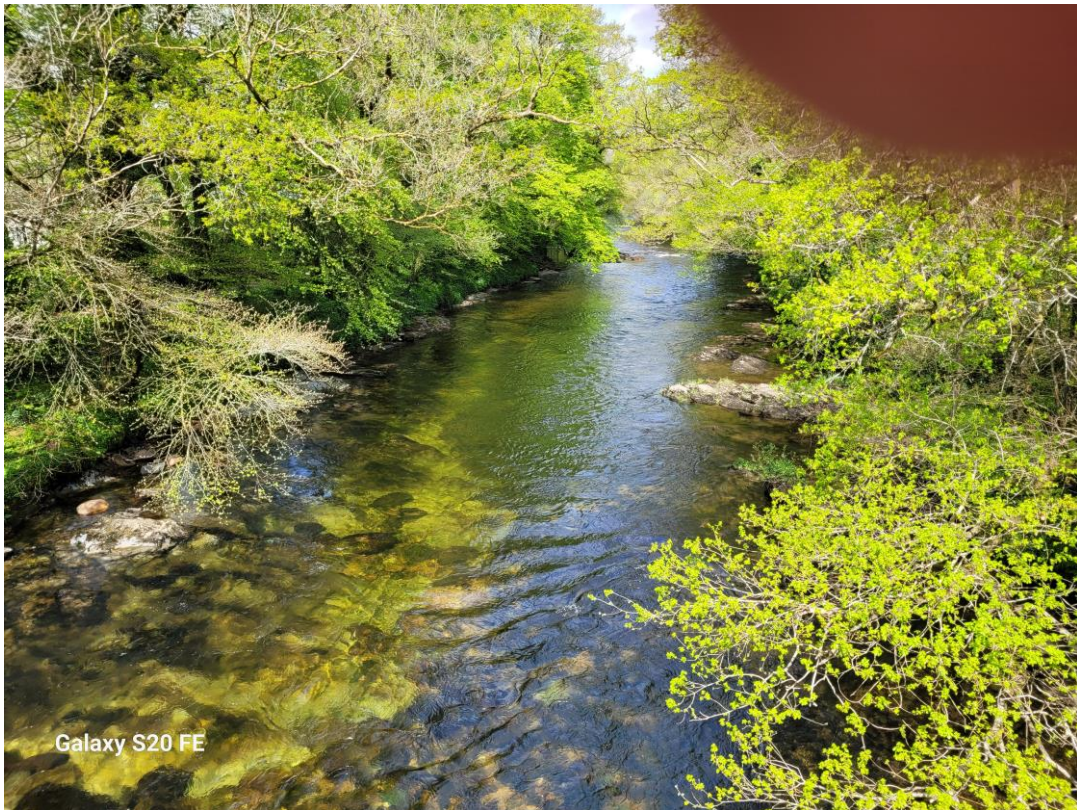


Photo 3. A nice mosaic of dappled light and shade – high quality habitat.

5.0 Conclusions

Habitat availability and quality, coupled with reliable water resources are a prerequisite for healthy trout populations; the reach can only perform for trout if suitable water quality is maintained. Cool, well oxygenated water is essential, and it is recommended to keep a watching brief on the effluent channel emanating from Sway Waste Water Treatment Works. Wild Fish www.wildfish.org are currently coordinating a citizen science "SmartRivers" project, where they offer advice and training to help landowners and community groups carry out their own water quality monitoring. Alternatively The Angling Trust have also rolled out a Citizen Science programme. More information is available here: <https://anglingtrust.net/get-involved/anglers-against-pollution/wqmn/>The WTT website library has a wide range of free materials in video and PDF format on habitat management and improvement: www.wildtrout.org/content/library

The Wild Trout Trust has also produced a 70-minute DVD called 'Rivers: Working for Wild Trout' which graphically illustrates the challenges of managing river habitat for wild trout, with examples of good and poor habitat and practical demonstrations of habitat improvement. Additional sections of film cover key topics in greater depth, such as woody debris, enhancing fish stocks and managing invasive species.

The DVD is available to buy for £10.00 from our website shop www.wildtrout.org/shop/products/rivers-working-for-wild-trout-dvd or by calling the WTT office on 023 9257 0985.

6.0 Acknowledgement

The Wild Trout Trust would like to thank the Environment Agency for their continued support of the advisory visit service, in part funded through monies from rod licence sales. The advice and recommendations in this report are based solely on the expert and impartial view of WTT's conservation team.

7.0 Disclaimer

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