

Westcountry Rivers Trust ART 237/
Frome Piddle & West Dorset Fisheries Association

Palmers Brewery Fish Pass Installation



The Report: December 2011



**Report (December 2011) produced by FP&WDFA
Project Manager Clive Thorp**

1. Introduction

Charles Dutton and Richard Slocock, Chair and Vice Chair respectively of the Frome Piddle & West Dorset Fisheries Association (FP&WDFa) were approached by John Hughes and Geoff May from the Friends of Rivers to see if the Association could find a way of improving the fish passage to aid spawning. To that end Westcountry Rivers Trust were approached to support the project and funds raised to support the project. The source of funding was from DEFRA via The Rivers Trust (formerly The Association of Rivers Trusts) and the Environment Agency.

2. Background

The project was initiated after a feasibility study was undertaken. Before the project was started there was only 2km of the River Brit system open to spawning migratory fish. The provision of a fish pass at Palmers Brewery would increase access on the River Asker and River Mangerton to 10.5 km and the River Brit a further 1km whilst the River Simene would benefit by an additional 10.5km. In total this would be an increase of some 21.5 km of potential spawning water.

The river has two barriers across it at Palmers Brewery, one is a weir and the second is a set of four hatches. The project objective was to install a fish ladder running up the side of the wall up to the first hatch. Dr Solomon's 2001 report stated *'this is clearly a major obstruction in a critical location, and some remedial action is required. This is a major structure, which provides the head for a water wheel at the brewery. It is important in fisheries terms as it lies downstream of the Asker confluence, thus affecting runs of fish to the whole catchment.'*

The fish pass design had received National Fish Pass agreement by Greg Armstrong on the 15th December 2010.

3. Tender process

Charles Dutton led the pre-tender and tender process. Specifications were sent out to 5 companies requesting quotes to undertake the fabrication and installation of the fish pass; 3 quotes were received from EA, Fishway Engineering Ltd and Fishtek Ltd. After receiving the tenders Fishway Engineering Ltd were appointed to fabricate and install the fish pass to the designs previously agreed by Greg Armstrong from the Environment Agency National Fish Pass Group.

4. Project Management

The project was funded through ART237 with funding held by Westcountry Rivers Trust and the Environment Agency. The project was established using proven project management and governance structures. A small Steering Group was established to oversee the project and Clive Thorp, Frome Piddle & West Dorset Fisheries Association was appointed to undertake the role of project manager. It was agreed that regular communications would take place via email which would include a project newsletter updating the steering group of progress against the series of actions required. The Steering Group membership included Dylan Bright, Director Westcountry Rivers Trust, Charles Dutton, Chairman Frome Piddle & West Dorset Fisheries Association and DJ Gent, Environment Agency Blandford, Darren Batten, Palmers Brewery.

5. The Site

Site plans were sourced that had to comply with the planning regulations, as they were required in scales 1:1250. The brewery owns the site of the weirs at Palmers Brewery and permission was sought, and granted, to have access to the hatches. This is an 18th-century weir with a variety of listed buildings that had to be taken into consideration during the planning application process. It is also a conservation area, which required an environmental survey to be undertaken to support the consent process.



Figure 1: Confluence of River Brit and River Asker above hatches and weir



Figure 2: Site of Hatches and Service Pipes for nearby housing estate

6. Planning Permission

It was recognised that there was a window of opportunity to install the fish pass; the project needed to be completed and operational by the end of October 2011. To that end the project timeframe worked back from that date. To add to the complexities of this project, which was already recognised as being in a conservation area with listed building around the site; the planning application process was changed part way through the project (April 2011). This therefore was a new process to the relevant agencies. It was decided to run the various planning

permissions/ Flood Risk Assessments/ Flood Defence Consents/ Environmental Surveys and Environmental Statement concurrently. Preparation of the planning documentation took some time to obtain all of the required information. Planning Permission was granted mid July.

7. Flood Risk Assessment Consent

Contact was also established during February 2011 with the Environment Agency at Blandford who initiated the Flood Risk Assessment. Consent was approved mid July 2011.

8. Ecological Survey and subsequent Environmental Report

Recognition that the immediate area around Palmers Brewery was a potential conservation area required some investigation, which was undertaken with Natural England who suggested a discussion with Dorset Wildlife Trust. Tamar Consulting were commissioned to undertake the initial ecological survey, which resulted in the identification of potential water vole activity. Dorset Wildlife Trust was then approached to provide support to an addendum report focusing on the water vole issue. These reports were submitted to the Environment Agency in support of the Consenting Process and approved on the 17th June 2011.



Figure 3: Sarah Williams, Dorset Wildlife Trust & Adrian Dowding, Tamar Consulting conducting a Water Vole Survey



Figure 4: Strimming the bank to encourage Water Voles to move upstream prior to commencement of works as part of the recommendations from the Water Vole Survey

9. Works

Works were scheduled for July 2011 and consisted of two phases, namely, the establishment of a concrete ramp, which would be used to support the fish pass, followed a week later with the installation of the fish pass itself. The summer had been extremely dry. However, we were very fortunate in that the concrete ramp was built and had 'gone off' within 3 hours of a major thunderstorm that threatened to wash away the ramp, however, this was averted due to the attention to detail by Fishway Engineering staff ensuring that any high flows remained out of the concrete channel.



Figure 5: Creating the concrete ramp alongside the bridge wall up to the first hatch



Figure 6: Very tight fit. Using a crane to lower very slowly between the hatch support frame and the power supply pipe.

10. Post Works

Following the installation of the fish pass 24 hours had to pass to allow the silicon finishing to 'go off'. The following day the hatches were dropped to allow the rivers to rise. It was with anticipation that we waited for the water to flow down the fish pass and demonstrate that it worked!



Figure 6: Within an hour the water level had risen sufficiently to come down the fish pass. At first a small trickle then the flow increased

11. Remaining outstanding issues

Silt immediately in front of the leat, which is used by the brewery to draw water to the watermill. Site visits indicated that it was not possible to install the boom as previously planned and this remains an outstanding issue. Alongside this was the need for a low wall/ baffle downstream of the fish pass to raise the tail water. It was agreed that this would be a 'wait and see' scenario. The Environment Agency has been kept informed of this and acknowledgement given that further flood risk assessment and consenting would be required.



Figure 7: Leat used by Palmers to draw water to turn the water mill. Siltation in front of the leat has caused problems in the past and required manual removal.

12. Formal Opening Ceremony

This was scheduled for the 18th October at Palmers Brewery. An initial press release was drafted but subsequently undertaken by the Marketing Team at Palmers Brewery. This led to several articles being released to local newspapers and television crews attending the ceremony and interviewing several members of the Frome & Piddle and Westcountry Rivers Trust.



Figure 8: The opening ceremony was celebrated by, from left to right, Cleeves Palmer, Charles Dutton, John Palmer and Dylan Bright