Eel traps at West Drayton, Middlesex

by Malcolm Tucker & Elizabeth Wood

Traps for eels are believed to have been fairly common in association with water-powered mills on lowland rivers, but they have received relatively little attention. A pair of later 19th century eel traps at West Drayton Mill was the subject of the first GLIAS field training session in July 1970, and is described in this article.

Site location and background

West Drayton Mill (TQ 054 791) straddles the River Colne at the village of West Drayton in the London Borough of Hillingdon. There has been a mill in this vicinity since the Domesday Survey. By 1796 the mill had been acquired by Nicholas Mercer, mealman and papermaker, who rebuilt the mill complex¹; by 1876 it had become the largest mill in existence making millboard (a stout pasteboard used in bookbinding). The mill was out of use by 1947, when the site was sold. There remain today the late-Georgian mill house and cottage, the ruined lower walls of parts of the mill, and one derelict breast-shot waterwheel.

100 metres north of the mill, on private land at TQ 054792, are the eel traps. The present twin-chambered structure is shown on the 1:2500 Ordnance Survey revision of 1895 (Fig. 1) and on subsequent editions, labelled 'sluice'. It is not known if there was an eel trap here earlier. The previous edition of the Ordnance Survey, surveyed in 1864, shows a single sluice.

Sale particulars of 1817² make no mention of traps, and only fishing rights (which will have included the popular sport of angling) are referred to in other papers. However, eel traps appear to have been common in this area, being found at both the neighbouring mills of Thorney and Colham. The popularity among Londoners of eels as a delicacy will have provided a ready market.

In 1970, permission to visit the site was given to GLIAS by the then owners, Penguin Books Ltd. The description below relates to that time. The eel traps were derelict but appeared to have been maintained until a few years previously. More recently, the mechanism of the traps has been vandalised and dismantled, and the structure severely damaged by erosion. However, a single trap at Thorney Mill (TQ 048794), accessible from a public footpath, is similar in construction to those at West Drayton — so unlike the basket-work traps frequently seen in 19th century illustrations from the Thames valley³.

Construction of the traps

The embanked course of the river served as the millpond, and the two eel traps are located in the embankment, in the outlet from a pair of hatches. The style of building construction and ironwork suggests a later 19th century date, confirmed by the evidence of the Ordnance Survey maps.

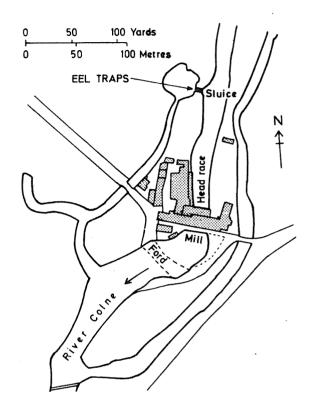


Fig. 1. Site plan of West Drayton Mill in 1895, based on 1:2500 O.S. map in Middlesex Record Office.

The arrangement of the traps is shown in Fig. 2 and in Plates 1 and 2. Two hatches are placed side by side and have a fall of about 5 feet (1.5 metres). The hatches and their frames are of timber with cast-iron rack-and-pinion gearing, supported by a brick-arched footbridge. Below each hatch is a horizontal brickwork chamber or flume, containing the wrought-iron grilles of the traps. Each chamber measures 25' 0" long, 3' 10\%" wide and 4' 8" deep (7.65 x 1.18 x 1.42 metres). To one side is a brick tank with a padlocked iron lid, evidently for keeping live eels. Construction is in yellow London stock bricks and lime mortar.

Each chamber is fitted with two horizontal grilles at a height of 2'7" (0.79m) above the bed. The leading end of the upstream grille can be lowered onto the bed by a rackand-pinion mechanism (Plate 1), the other end being hinged. The downstream grille is fixed, and a vertical grille closes the tail.

When the hatch was opened, with the moveable grille lowered, eels browsing on the bed of the mill stream would be swept onto the grilles and strended there, the water flowing away beneath. Perhaps this was done at night, when the water was not required to drive the mill wheels. A 9" square hole in the side of the chamber allowed the eels to crawl into the keep tank, where a flow of water through gratings at a lower level would keep them alive until it was

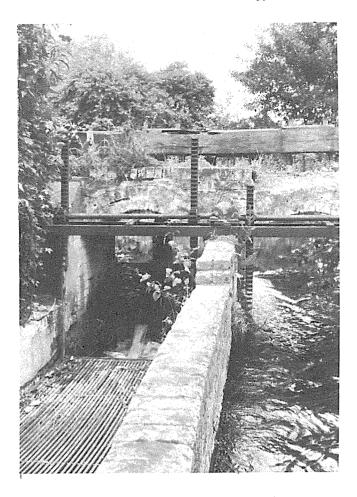


Plate 1. View upstream of West Drayton eel traps.

convenient to take them to market. The keep tank had a substantial, hinged and padlocked steel lid, now missing, fitting a relatively modern frame of steel angles.

When the hatches were used to pass flood water, the moveable grille would be raised out of the way of debris. The grilles are neatly constructed in wrought iron, with 5/8" (16mm) square longitudinal bars at 1" (25mm) centres. At one end these are flattened and fixed by rivets to angle irons and at the other end they are rounded and rivetted directly through the frame. The frame is of 3" x $\frac{1}{2}$ " (75 x 12mm) flats with mortised joints and with cross-bars at intervals notched to receive the longitudinals.

The shaft of the rack-and-pinion mechanism operating each grille was turned by a handspike in a cast-iron boss, fitted with a ratchet and pawl. The mechanisms have been remounted on a light partly-welded frame of reused angle irons, probably in the 1930s, an overflow channel built in concrete having interfered with the original support.



Plate 2. View downstream.

Footnote

This article describes only the mechanism of an eel trap. There appears to be scope, for someone with time available, for research into the social and economic aspects of eel catching in West Middlesex.

Acknowledgements

We thank Mr Maurice Bawtree, who first drew our attention to the site, Mr Cox, Chairman of West Drayton History Society, for permission to quote from material in the West Drayton and District Historian, and also the staff of Uxbridge Public Library and the Middlesex Record Office.

References

- 1. Mill bridge enquiry. West Drayton and District Historian (September 1977), No. 57, pp.8–10.
- 2. Uxbridge Library Collection. West Drayton Mill, 1817. Museum sale catalogues, West Drayton. MUS ACC 927.
- For examples of basket-work traps on Thames Weirs, see photographs by Taunt of Oxford in The Thames Illustrated by J. Leyland, published by Geo Newnes, London, no date (c.1900).

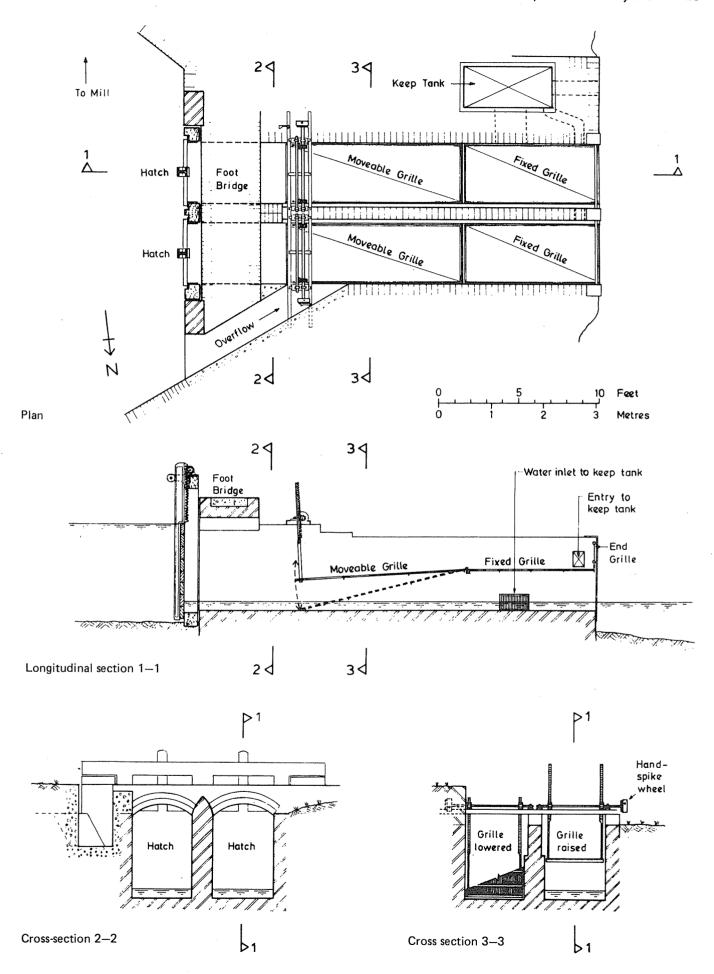


Fig. 2. Plan and sections of pair of eel traps.