

Pilotage Notes for River Tamar between Weir Quay and just short of Newquay (with corrected lat and long)

On 19 April 2011 I motored up and down the River Tamar from Weir Quay to close to Newquay and back in Pique-Nique, my 13 foot dinghy that draws about 0₄ (the skeg on the outboard) on one of the lowest tides of the year, 0.3m, to investigate any hazards to navigation etc revealed by the unusually low water. I suspect that the tide was actually close to or below chart datum (Lowest Astronomical Tide (LAT)) – see State of River, below. I took lots of photos, notes of my main observations and some soundings. Some of the soundings at below 0₄ were unintentional. I offer these notes to help any navigator who wants to go up the Tamar but it's entirely your risk how you proceed.

My advice and Hazards

I hope these notes don't put anyone off taking yachts and other vessels up the Tamar on what is an outstandingly scenic trip. In general the chart seems to be accurate but I did note three specific hazards and there are many submerged trees and other debris which tend to accumulate on the inside of bends that can also pose a hazard too. The prudent mariner should stick to the main(ish) channel which tends to follow the outside of the bends in the river, avoid getting too close to the inside of the bends and should pay particular attention to these hazards:

- The rock opposite the lime kiln just below Cotehele which extends about 5-10m from the mud bank and dries to about 1₅ [$50^{\circ} 29.22.32N 4^{\circ} 13.27.46'W$]
- The submerged tree below the cliffs approaching Calstock (the land slip it fell from is quite obvious) [$50^{\circ} 29.51.85N 4^{\circ} 13.16.28W$]
- The submerged tree west of the old brickworks and to the east of Okeltor [$50^{\circ} 29.48.82N 4^{\circ} 11.39.70W$].



Rock by lime kiln (Quay (ru)) on Imray chart C14) at Cotehele – tide still ebbing! [$50^{\circ} 29.22.32N 4^{\circ} 13.27.46'W$]



This rock stands out by about 10m – you can just see that it is implied on the chart but it's not noted as a specific hazard, possibly because the bank above and besides the rock has been eroded since the chart survey. I think it is a hazard because it's right on the line that a prudent mariner is likely to take approaching Cotehele.



This photo does not show how far into the channel this tree extends, probably to at least 15m, even the upper limb may be underwater a few hours before and after high water. I struck several underwater objects when trying to get immediately downstream of the tree to photograph it. It's on the outside of the last bend before Calstock in the deep water channel. [50° 29.51.85N 4° 13.16.28W]



Sunken tree in the middle of the channel at Okeltor Sewerage Works [50° 29.48.82N 4° 11.39.70W].

These notes also cover:

- State of the river on the day
- The Tamar's general characteristics including chart accuracy, profile of the bottom and where debris tends to accumulate
- A submerged and upside down wreck

The voyage

Predicted times and heights of LW were Devonport 1341 BST 0.3; Cargreen 1401 0.0; Cotehele 1426 0.0. I left Weir Quay at approx 1200 BST, reached the limit of navigation just short of Newquay at about 1430 (too shallow to proceed). At this stage the river was still falling: in 13 minutes (camera clock) it fell about 6 inches. Nearly an hour later, just by Halton Quay the tide was still ebbing with about one knot but less than 10 minutes and half a mile later the tide just south of Pentillie Quay was flooding strongly at over a knot. I got back at about 1600.

State of the river on the day

Although not the lowest predicted tide of the year, the river was exceptionally low: a high pressure system of 1020ish mb and a very low flow of water in its upper reaches may have contributed. I wasn't able to be in all places at the moment of the lowest state of the tide but even before definite low water much of the river upstream from just south of Pentillie was less than 0₅ deep. At or close to LW extensive drying sandbars by Ward Farm, between North Hooe and Halton Quay and between Halton Quay and Pentillie Quay were revealed. These are suggested on the chart (charted depths 0₁) but still came as a surprise and as they were actually about 0₃, suggest that the tide was below LAT. At one stage when just downriver of North Hooe I had to get out and haul Pique-Nique in order to reduce draught and to find the channel. I failed to find the channel and I'm sure that I could have waded to Cornwall without getting my knees wet.



*Sandbar opposite Halton Quay which roughly follows the line of moorings, one of which had the mooring block on dried sand.
Taken at or very close to LW: nearly all of this water was less than 0.4 deep.*

The Tamar's general characteristics

What surprised me was how gently sloping the sides were (particularly on the inside of bends), how flat the bottom of the river was, how sandy/coarse sandy it was too and how narrow the channel actually was. In some cases there was no noticeable channel or at least I couldn't find it. This profile is shown in the *sandbar opposite Halton Quay* photo above. The outboard skeg was scraping the bottom until I was well south of Halton Quay as well as at other places.

Debris tends to accumulate downstream on the inside of the bends – I can't tell how much this debris moves or doesn't move but the inside of all bends from Ward Farm upstream had significant debris.

I used Imray chart C14 which seemed to be reasonably accurate.



Debris on inside of bend, downstream: just below the final bend into Calstock. All covered at HW. All the other downstream insides of bends had similar debris.



Debris on inside downstream of bend at Tuckermarsh

The wreck

It's not often one finds a genuine wreck that is not marked on the chart:



Wreck of wooden vessel about 20 foot LOA. 50° 29.55.92N 4° 11.33.59W. It is visible on Google Earth and has been there for several years.

Comments and suggestions for improvement gratefully received. I'll find somewhere to lodge the other photos on the interweb so you can see them.

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