

Provisional. Not to be quoted without reference to the writer

R.V. TELLINA

Report for Cruise 5/1967

Staff:

J. W. Talbot
J. Wooltorton
Miss G. Read (part time)

Duration:

17th April-5th May
All times are B.S.T.

Aims

To obtain information on the movement and mixing of water in the estuary of the river Fal. In particular information was required on the dispersal of water over the flats and on the exchange of water between the estuary and the English Channel.

Narrative

TELLINA left Lowestoft on 17th April and had a good passage to Falmouth, arriving 0200 hours on 19th. Mr. Talbot joined the ship on 19th and series of depth samples for salinity analysis were taken on 20th and 21st at about high and low water respectively. These samples were taken in the main channel of the estuary from near Messack Point to a position seaward of Black Rock.

J. Wooltorton joined the ship on the afternoon of 21st and further equipment which had travelled from Lowestoft by road, was installed aboard. Miss Read arrived in Falmouth on the evening of 21st and worked aboard on each of the following days. After checking the current measuring equipment on 22nd, current measurements and samples were taken on 23rd at a position just outside the mouth of the estuary.

Starting at 1100 hours on 24th a detailed series of current and temperature measurements and of samples for salinity analysis were taken at a position in the centre of the main channel off Messack Point. This work was continued until 1345 hours on 25th thus giving ample coverage of two cycles of the Spring Tides.

Experiments to study dispersion of water in the estuary were carried out using the dye Rhodamine-B on 27th, 28th, 29th April and 1st, 2nd and 3rd May. In each case only a small quantity of dye was used, no release involving more than 5 lb of rhodamine solution. Five of the releases were made at high water and one at low water slack. After each release the dye patch was tracked for a half or whole tidal cycle depending on the hours of daylight relative to the tides. Where a dye patch passed close to the shore a tendency was noticed for small volumes of dye of appreciable concentration to be left behind as the main volume of dye swept past. In general the movement of surface water in the estuary appeared to be little affected by the main channel and was generally in a N-S direction.

Mr. Talbot and Miss Read returned from Falmouth on the night train of 3rd May. TELLINA was prevented from sailing to Plymouth on 4th, as had been planned, by gale force S. E. winds. Instead it was found possible to leave her in Falmouth and J. Wooltorton and the crew then returned to Lowestoft overnight on 4th May.

J. W. Talbot
22nd May 1967

Seen in Draft: W. B.

Initialled: A. J. L.

Distribution:

Dr. Cole
Mr. Lee
Captain Aldiss
Mr. Burd
Mr. Bolster
Mr. Cattley
Mr. Corlett
Mr. Garrod
Dr. Harden Jones
Mr. Iles
Dr. Jamieson
Mr. Margetts
Mr. Trout
Mr. Holden
Dr. Purdom
Mr. Bridger
Mr. Mitson
Mr. Tungate
Mr. Williams
Mr. Wood
Mr. Adams
Mr. Mills
Mr. Kay
Miss Conolly
General Lab.
Lab. Registry
Library (2)
Mr. Whiting
Mr. Simpson
Dr. Reynolds
Chief Inspector
All District Inspectors
Fisheries Registry
Skipper Burroughs
Mr. Buchanan Wollaston
Mr. W. Baird, D.A.F.S.
Mr. Glover
Hydrographic Department
Dr. Lucas
Director, N.I.O.
Dr. Peachey
Mr. Shelbourne
W.F.A.

Mr. Talbot
Mr. Woollorton
Miss Read