

REGISTRY. FIA 1115. 79

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1971 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 11

(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

J W Talbot
Mrs M Boon

DURATION

18-30 October

LOCALITY

East Anglian Coast

AIMS

1. To lay and recover two inshore current meter rigs in order to complete an array of five rigs off the Caister-Southwold coast;
2. To make and survey a number of releases of Rhodamine-B;
3. To measure the salinity and temperature distribution and to make measurements of water velocity using Direct Reading Current Meters in order to supplement the data from the moored rigs.

NARRATIVE

The work completed during this cruise was limited by periods of adverse sea conditions. South westerly gales on the 18th and 19th abated to force 6 on 20 October and, working in the lee of the coast, TELLINA was then able to lay a moored current meter rig off Caister. A line of hydrographic stations was worked the same day off Yarmouth. The next morning the wind had decreased further, to force 4, and a release of 15 gallons of 40% Rhodamine-B solution was made off Lowestoft Ness at the morning high water slack. RV NUCELLA assisted in surveying this dye patch and also made measurements of salinity, temperature and water velocity. Survey work on this release of Rhodamine continued over a period of 8½ hours. By this time the size of the dye patch and its degree of dilution were approaching values where further survey work was unlikely to be worthwhile and work was becoming increasingly difficult due to an increase in strength of the wind.

A second similar release of Rhodamine was made from the same release position at the morning low water slack on 23 October. Sea conditions were similar to those experienced for the first release since although the wind had dropped to force 3 it had also swung slightly to the south so that there was little protection given by the coast. Survey work on this dye distribution was broken off after 9½ hours. On 25 October a grid was worked for salinity and temperature over the area near the Newcome Sandbank over the period of the

flood tide.

For the next three days easterly winds were of sufficient strength to prevent further survey work but on 29 October TELLINA recovered the moored meter rig and also released and surveyed a patch of Rhodamine-B. This release was at a depth of 7 metres at a position just off the Newcome Sandbank and during the flood tide. The hydrographic equipment was off loaded on 30 October.

RESULTS

1. One inshore current meter rig was laid and recovered off Caister. The second rig, which was to have been laid by TELLINA was in fact laid and recovered by NUCELLA.
2. Three releases of Rhodamine-B were made and surveyed.
3. Measurements of salinity and temperature were made. No water velocity measurements were made from TELLINA although a small number were made in the area from NUCELLA.

J W Talbot
11.11.71

SEEN IN DRAFT: WB

INITIALLED: AJL

DISTRIBUTION

Basic list
J W Talbot
Mrs M Boon