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1985 CHARTER VESSEL PROGRAMME

REPORT:

RV PRINCE MADOG

DURATION:

27 MAY-7 JUNE 1985

STAFF:

K Brander (SIC)

R Flatt D Palmer

S Stevens T Watson

R White (Menai Bridge)

LOCALITY:

IRISH SEA

AIMS:

To carry out a plankton survey of the larvae of Nephrops norvegicus in the northern Irish Sea.

## NARRATIVE:

The ship sailed from Menai Bridge at 1015 on 27 May and the first station was worked at 1400 that afternoon. The gear did not dive properly and continued to dive after hauling had commenced. This resulted in damage to the nosecone, net and flowmeters at the second station, when the gear hit bottom. Different combinations of depressor and drogue were tried at the following two stations until a stable combination was achieved at station 5 using the weighted metal body, twin Scripps depressors and a small drogue. This rig was used with 40 mesh per inch net throughout the rest of the survey and it stopped diving as soon as the winch was halted. The only problem, which could not be overcome, was that the rate of diving decreased considerably with increasing depth, which made it difficult to maintain an even dive profile or to sample depths below 60 m at all. The maximum depth sampled was therefore restricted to 60 m, although on one station a depth of 89.4 m was reached by using all the cable available (400 m). In spite of using the coarser 40 mpi net, clogging with Phaeocystis or jellyfish was fairly frequent.

FIfty-six stations, covering the spawning area in the western Irish Sea, were worked during the first week and the ship worked a sixteen hour day. The ship docked at Port Penrhyn at 0840 h on Friday 31 May and sailed again at 1030 on Monday 3 June. A further thirty-six stations covering the eastern and northern Irish Sea were worked until poor weather and a bad forecast stopped the survey at 0730 h on 6 June. The ship sailed for Port Penrhyn, docking at 1400 h.

## RESULTS:

- 1. A total of 92 stations were sampled using the 76 cm High Speed Tow Net with 40 mesh per inch net. One sample was lost due to gear damage.
- 2. Temperature and salinity profiles were obtained using the Guildline CTD at each station and surface water samples were taken for salinity, silicate, nitrate and phosphate determination.

Seen in draft: Y Donovan Initialled: D Garrod

Keith Brander 18 June 1985

Distribution: Basic List plus staff

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