

Not to be cited without prior reference to DANI ASRD.

MRV LOUGH FOYLE CRUISE REPORT.

IRISH SEA VIIA JUVENILE GADOID SURVEY 30th OCTOBER to 9th NOVEMBER 1990.

Cruise Personnel:

W J Mc Curdy	SSO (SIC)	DANI ASRD
Mrs A Hayes	ASO	DANI ASRD
B T M Hart	ASO	DANI ASRD
S A S Pollock	TASO	DANI ASRD (Liverpool Polytechnic)

Cruise Objectives:

- All trawling operations to be carried out during daylight hours.
1. To record the distribution of juvenile Gadoids and other species at the 29 Irish Sea sampling stations successfully trawled in June 1990.
 2. To identify and trawl four replacement stations for those found to be unsuitable in the June survey.
 3. To identify and trawl additional juvenile Gadoid trawl stations, with depth and substrata combinations not previously sampled, in any cruise time remaining after the achievement of objectives 1 and 2 .
 4. To collect sufficient otoliths from the juvenile gadoids taken in the catches, to produce an age/length key for the juveniles of each species.
 5. To collect otoliths from adult Hake Merluccius merluccius L., for winter growth zone staining experiments.

Cruise Report:

All DANI scientific staff boarded the Lough Foyle on the evening of Monday 29th October. The Lough Foyle left Belfast at 09:18hrs on Tuesday 30th October in W'ly 6-7, after a delay caused by the non delivery of some items of fishing equipment. After a further short delay due to the rigging of alternative equipment, the vessel commenced trawling on station 33 at 13:50 hrs, in SSW 6-7. Station 32 was also trawled, in W'ly 6, before fishing operations ceased for the day. On 31st October stations 30,36 and 37 were trawled in NW'ly 5-7.

On 1st November stations 38,61,62, and 63 were trawled in NW 3-4 to N'ly 3-4. The sample from station 61 was invalid, as the rockhopper trawl net did not fish effectively due to incorrect readings from the trawl winch warp length meters. Stations 64,65,66,76 and 77 were trawled in NE'ly 3-5 to N'ly 3-5 on 2nd November. Stations 46,48,51,50 and 52 were trawled in N'ly 3-6 on 3rd November, after a delay at station 51 caused by a faulty trawl winch warp meter.

On 4th November stations 56,75,11 and 78 were trawled in N'ly 2-4. Stations 79,73,71,72, and 17 were trawled in NE'ly 3-4 to N'ly 3 on 5th November. On 6th November stations 44,15,70,80 and 81 were trawled in E'ly 3 to N'ly 2-3. Stations 82,83,84,58 and 86 were trawled in E'ly 3-4 to SE'ly 5 on 7th November. On 8th November station 35 was

trawled in SE'ly 5 and the Lough Foyle returned to Belfast at 14:30hrs the same day.

All 29 young fish survey trawl stations were successfully fished, although the numbers of "0" group cod caught were lower than expected, due to strong tidal flows during the survey period. Four replacement sampling stations and six new sampling stations for young fish were also successfully trawled.

"0" group cod, *Gadus morhua* L. were most numerous at stations 62, 64, 51, 46, and 79. "1" group cod were most numerous at stations 61 and 62. "0" group haddock, *Melanogrammus aeglefinus* L. were most numerous at stations 30, 51, 46, 70, 15, and 35. "0" group hake, *Merluccius merluccius* L. were most numerous at stations 51, 11, 72, 17 and 44. "0" group whiting were most numerous at stations 30, 36, 64, 66, 48, 51, 46, 50, 52, 56, 75, 75, 11, 73, 71, 72, 17, 44, 15, 80, 78, 79, and 81. "1" group whiting *Merlangius merlangus* L. were most numerous at stations 30, 36, 62, 63, 64, 66, 48, 51, 46, 50, 52, 56, 75, 11, 72, 17, 44, 15, 35, 77, 78, 79, and 81.

Otoliths were collected from 139 whiting, 113 hake, 162 cod and 111 haddock. The presence of "0" group john dory *Zeus faber* L., (8 in a 28 min tow) was noted at station 35, outer Belfast lough.

SIC

Master

