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

1986 RESEARCH VESSEL PROGRAMME

REPORT : RV CLIONE : CRUISE 11b

STAFF:

- D J Symonds
- T J Hulme
- G J Howlett
- Mrs M J Boon
- D W Palmer

DURATION:

Left Fleetwood 1100h, 20 September
Arrived Lowestoft 0940h, 7 October
ALL TIMES ARE GMT

LOCALITY:

Irish Sea, western English Channel, southern North Sea.

AIMS:

1. To carry out the annual survey of 0- and 1-group gadoids in the Irish Sea.
2. To carry out a groundfish survey in the eastern Irish Sea using the 3m beam trawl.
3. To tag spurdogs if suitable concentrations are found.
4. To sample groundfish species in the western English Channel using the 3m beam trawl.
5. To collect live plaice and dabs from the Smith's Knoll area at the end of the cruise.

ADDITIONAL AIM:

6. To investigate the distribution and abundance of yolk sac herring larvae on the spawning grounds east of the Isle of Man.

NARRATIVE:

Staff travelled to Fleetwood by road on 19 September and joined the ship at 1000h on the 20th. The pre-recruit gadoid survey commenced at 1530h 15 miles ESE of Douglas, Isle of Man. An overnight steam took the CLIONE to Cardigan Bay where the four inshore stations were completed. The stations at the most southern end of the survey area were picked up on the following day and trawling continued northwards until the 26th. The two stations off the North Wales coast were done the next morning and the beam trawl survey of the eastern Irish Sea commenced. An overnight steam to the northern end of the area resulted in the final station of the pre-recruit gadoid survey being completed on the 28th. Beam trawling continued until CLIONE put into Douglas, Isle of Man, at 0930h on 29 September to replenish stores and water and to investigate a fault in the sanitary water pump.

Problems with repairs to the pump delayed departure from Douglas until 1900h on 30 September. Sampling with the 53cm high speed townet commenced immediately and the grid of stations over the Manx herring spawning grounds was finished by 1007h on the following day when the beam trawling survey was resumed. This was successfully completed at 1600h on 2 October.

Eight hauls with the Granton trawl for spurdogs were made off Point Lynas, Anglesey and in the southern Irish Sea. While hauling at the final station, the aft warp parted but the gear was retrieved with little damage. Course was set for Smiths Knoll at 2200h on 3 October.

Nine hauls with the Granton trawl were made at Smiths Knoll on 6 October before CLIONE proceeded to Lowestoft.

An unusual feature of this cruise was the fine settled weather pattern which resulted in no fishing time being lost due to weather.

RESULTS

Aim 1. Thirty two valid hauls, with Granton trawl, stratified by depth and area were made for pre-recruit gadoids (figure 1). Catches of commercial species were generally poor, the only hauls of note being 4-5 baskets of good size herring at stations SW of the chickens and a basking shark (about 2.5m in length) off Point Lynas. As usual on this survey the dominant species by number were herring, sprat, poor cod, Norway pout and small whiting. Horse mackerel were less numerous than in previous years.

Provisional mean numbers of 0- and 1- group cod and whiting per 1 hour tow are given in the following table:

Depth Zone(m)	Sector	Cod		Whiting	
		0-group	1-group	0-group	1-group
0-50	NW	1.0	0.5	51.2	208.5
	NE	0.2	1.8	2.0	157.2
	SW	0.0	0.5	177.0	8.2
	SE	0.2	0.2	84.8	582.5
	All	0.4	0.8	78.8	239.1
50+	NW	0.0	0.0	96.8	65.5
	NE	2.8	0.0	402.8	18.5
	SW	0.0	0.0	1.8	0.0
	SE	0.0	0.0	1.5	15.8
	All	0.7	0.0	125.7	24.9
Total Irish Sea		0.5	0.4	102.2	132.0

Only 17 0-group and 12 1-group cod were caught in the 32 survey stations. Catches of 0-group whiting were about average whereas those of 1-groups were better than expected.

756 otoliths were taken from 10 species of fish for pre-recruit and biological studies and to augment the market sampling programme:

Cod	18
Whiting	278
Pollack	29
Hake	39
Mackerel	130
Plaice	153
Sole	43
Lemon sole	47
Witch	4
Monkfish	15

Samples of whiting, plaice and dab were deep-frozen for AEP2 (Burnham), small fish for the Fish Identification course and various elasmobranchs for Mr C Martin (UEA).

The shipboard computer worked well with no serious problems and a full set of output documents were produced before the ship docked.

AIM 2 Thirty seven valid hauls, each of 15 minutes duration, were made with the 3m beam trawl in the north-eastern sector of the Irish Sea (figure 2). Thirty five species of fish were taken of which the most important by weight were plaice, dab and sole and, by numbers, poor cod and gobies. Pre-recruit soles (mostly 2 year olds) were caught in 19 of the hauls, the largest numbers being at two stations off Blackpool (51 and 27/15 min); off Red Wharf Bay (10/15 min) and north of the Dee estuary (9/15 min).

AIM 3 No concentrations of spurdogs were found and, from the 8 hauls made, only 28 fish were released.

AIM 4 No time was available to carry out this aim.

AIM 5 Twenty eight female plaice, 9 male plaice and 11 female dabs were returned live to the laboratory.

AIM 6 Twenty hauls were made with the high speed Towner fitted with the Guildline CTD package (figure 2). A fault in the electronics vitiated recording of salinity, temperature and the depth profile.

D J Symonds
7 October 1986

SEEN IN DRAFT: D J G
G Sinclair Captain
R C Newrick Fishing Skipper

DISTRIBUTION:

Basic list+
D J Symonds (4)
T J Hulme
G J Howlett
Mrs M J Boon
D W Palmer
K J Medler
Dr Brander
North Western and North Wales SFC
Cumbria SFC

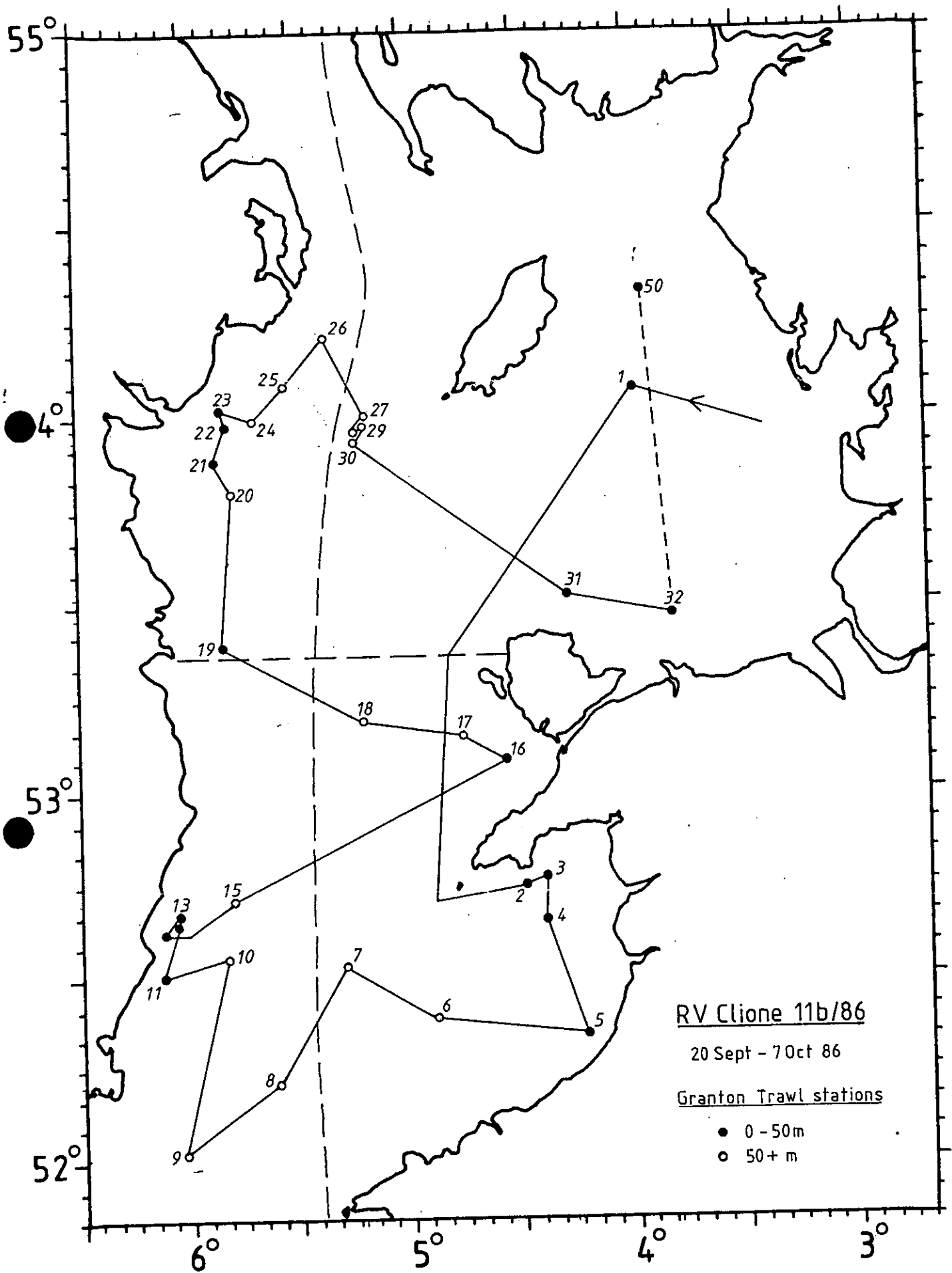


Figure 1

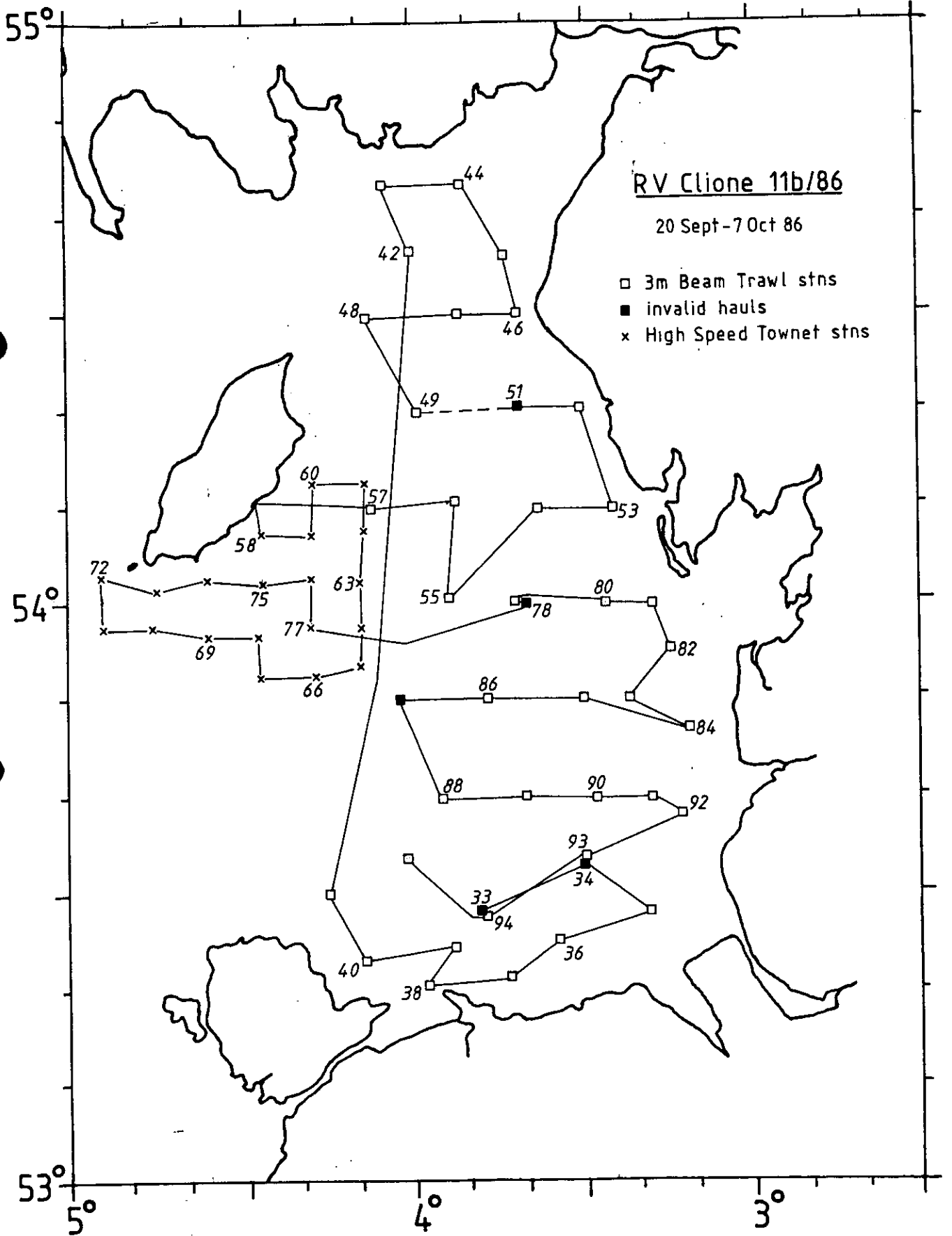


Figure 2