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MFV Genesis BF505

Survey 0117H

REPORT

Dates

11-20 April 2017

Ports

Loading: Macduff, 11 April 2017 **Unloading:** Macduff, 20 April 2017

Personnel

M. Kinghorn SIC

G. McAllister

G. Scott (SFF Observer)

Project Days: 10 days, RV1705 (20434)

Fishing Gear: Anglerfish Trawl BT 195

Objectives

- 1. To undertake a nationally co-ordinated demersal trawling survey of anglerfish species in ICES IVa Northern North Sea.
- **2.** To obtain temperature and depth profiles at each trawling station.
- **3.** To record and map distributions of Megrim, Four Spot Megrim and Cod.
- **4.** To collect biological data on Angler, Cod, Megrim and Four Spot Megrim.

Narrative

Genesis sailed from Macduff at 14:00hrs on 11th April in good sea conditions and following a pre sail discussion concerning the weather forecast, the vessel headed 20 miles east to the first station with a view to completing the survey in a clockwise direction. A northerly wind blowing 20-30 knots during the first few days did not hamper any fishing activity and the charter proceeded on schedule with improved weather allowing for smooth transitions between the stations.

Additional stations were completed to east of Orkney and Shetland respectively as time allowed. Passage was then made along the northern most tows before entering the Norwegian Sector at 2330 on the 14th April to complete 5 stations. Genesis exited the Norwegian Sector at 0400 on the 16th before re-entering at 1900 to complete a further 9 stations. A final exit was made for the Norwegian Economic Zone at 1530 on the 18th having completed a total of 14 stations in the sector. Notification regarding movement in and out of the Norwegian Sector was provided and maintained throughout via emails to the Directorate of Fisheries in accordance with the consent given on 11/04/2017.

Genesis headed west to complete the remaining core stations and owe to favourable weather conditions and making good time, was able to complete a further 4 additional tows before returning to Macduff on the 20th April.

Equipment was unloaded and all staff departed the Genesis on the 20th April.

Results

The trawl gear performed very well throughout the survey, sustaining damage to the belly and top sheet on only occasion during the 5th haul. A total of 37 stations were completed, 35 of which were valid and 2 foul owe to tearing the net (Haul No.5) and coming fast towing through a bed of *Geodia spp.* in the Norwegian Sector (Haul No. 27), see **Figure 1**.

The SCANMAR system was used to monitor gear geometry throughout and good data was collected for every haul. A bottom contact sensor, in large, provided good information on ground contact and provided validation on touchdown and lift-off of the gear from the seabed. A DST attached to the trawl returned a depth and temperature profile for the entire survey.

Of the 35 valid hauls, 33 were of 60 minutes duration. On the other two occasions the net came fast on the seabed but were classed as valid as it occurred after 30 minutes.

For every haul biological samples were collected for all angler fish, black-bellied angler, cod, megrim, four- spot megrim and skates (*D. flossada* and *D. intermedia*) where applicable with subsampling of cod and megrim as determined by the sampling protocol. **Table 1** provides the details of all the sampling undertaken during survey.

All haul summary data, catch composition, length frequency and biological data were entered directly into the FSS system at sea. Upon return to the lab, the data was transferred to the main FSS database.

Submitted

M Kinghorn 23 May 2017

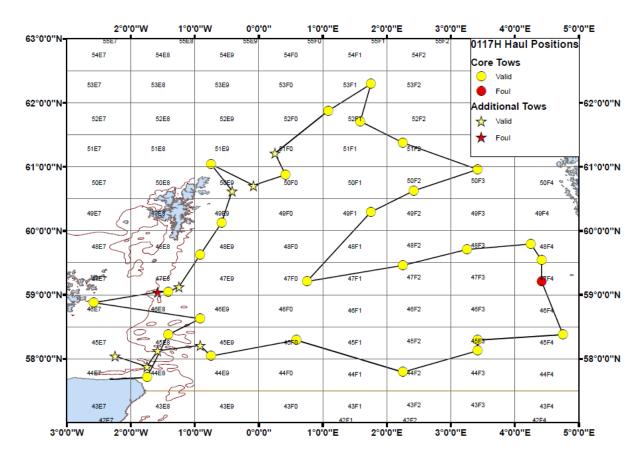


Figure 1: Survey map showing all completed stations (35 valid and 2 foul) for 0117H.

Species Name	Biological Samples	Number Measured	CPUE No.s/h	CPUE Kg/h
Angler (Lophius piscatorius)	353	353	10.3	25.8
Black-bellied Angler (Lophius budegassa)	11	11	0.3	0.7
Cod (Gadus morhua)	228	780	22.9	43.3
Four-spot Megrim (Lepidorhombus boscii)	18	58	1.7	0.5
Megrim (Lepidorhombus whiffiagonis)	62	232	6.8	3.8
Blue Skate (Dipturus flossada)	2	2	0.1	0.1
Flapper Skate (Dipturus intermedia)	3	3	0.1	1

Table 1: Number of biological samples, measured fish and Catch Per Unit Effort (CPUE) of the species of interest during 0117H.