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MFV *Genesis BF505*

Survey 0218H

REPORT

Dates

06 - 20 April 2018

Ports

Loading: Macduff, 06 April 2018

Port Call: Peterhead, 13 April 2018

Unloading: Macduff, 20 April 2018

Personnel

R. Gillespie-Mules SIC

G. McAllister

C. Henderson (SFF Observer)

Z. Mclean (SFF Observer)

Project Days: 15 days, RV1805 (20499)

Fishing Gear: Anglerfish Trawl BT 195

Objectives

1. To undertake a nationally co-ordinated demersal trawling survey of Anglerfish spp. (*Lophius piscatorius* and *Lophius budegassa*) in the Northern North Sea, ICES area IVa.
2. To record and map distributions of Megrim (*Lepidorhombus wiffiagonis*), Four-Spot Megrim (*Lepidorhombus boscii*), Cod (*Gadus morhua*), Blue Skate (*Dipturus cf. flossada*) and Flapper Skate (*Dipturus cf. intermedia*).
3. To collect biological data on Anglerfish species, Cod, Megrim, Four-Spot Megrim, Blue Skate and Flapper Skate.

Narrative

Genesis sailed from Macduff at 17:00 on 06th of Apr in good sea conditions heading North to the first station with a view to completing the survey in a clockwise direction. For the entire survey the weather was good and didn't hamper progress.

The first 4 tows were completed without incident. The 5th and 6th tow were foul however, due to a tear in the cod end and coming fast 6 minutes after shooting respectively. The next 7 tows were valid, the 14th tow being invalid due to a tear in the cod end. Genesis continued completing the West of Shetland tows before proceeding North over Shetland and completing 18 tows whilst making her way East. The 33rd tow was invalid due to coming fast on poor bottom. Three more tows were completed before making for Peterhead on the 14th of Apr to land and change crew.

Genesis sailed again late on the 14th heading East. An additional day was allocated to the survey to maximise coverage of the survey area in Norwegian waters. Genesis proceeded to enter and survey the Norwegian waters on the 18th of Apr, managing to complete 7 tows before leaving Norwegian waters on the 19th of Apr, returning to Macduff on the 20th of Apr.

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

Results

The trawl gear performed well throughout the survey. 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.

In total 55 tows were undertaken. The cod end sustained damage in two occasions resulting in invalid tows. Two additional tows were also invalid due to coming fast and retrieving the net before the minimum 30 minutes had passed to prevent further damage.

Of the 51 valid hauls, 46 were of 60 minutes duration. On 4 occasions the net came fast on the seabed but were classed as valid as it occurred after 30 minutes. One haul was 3 minutes over 60 due to the net touching down but was unsettled.

For every haul biological samples were collected for White Anglerfish, Black-bellied Anglers, Cod, Megrin, Four-spot Megrin and Skates (*D. flossada* and *D. intermedia*) where applicable, with subsampling of Anglers, cod and megrim spp. as determined by the sampling protocol. Additional length frequency and biological information were collected for Shagreen Ray (*Leucoraja fullonica*) and Starry Ray (*Amblyraja radiata*). **Table 1** provides the details of all 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

R. Gillespie-Mules
26/06/2018

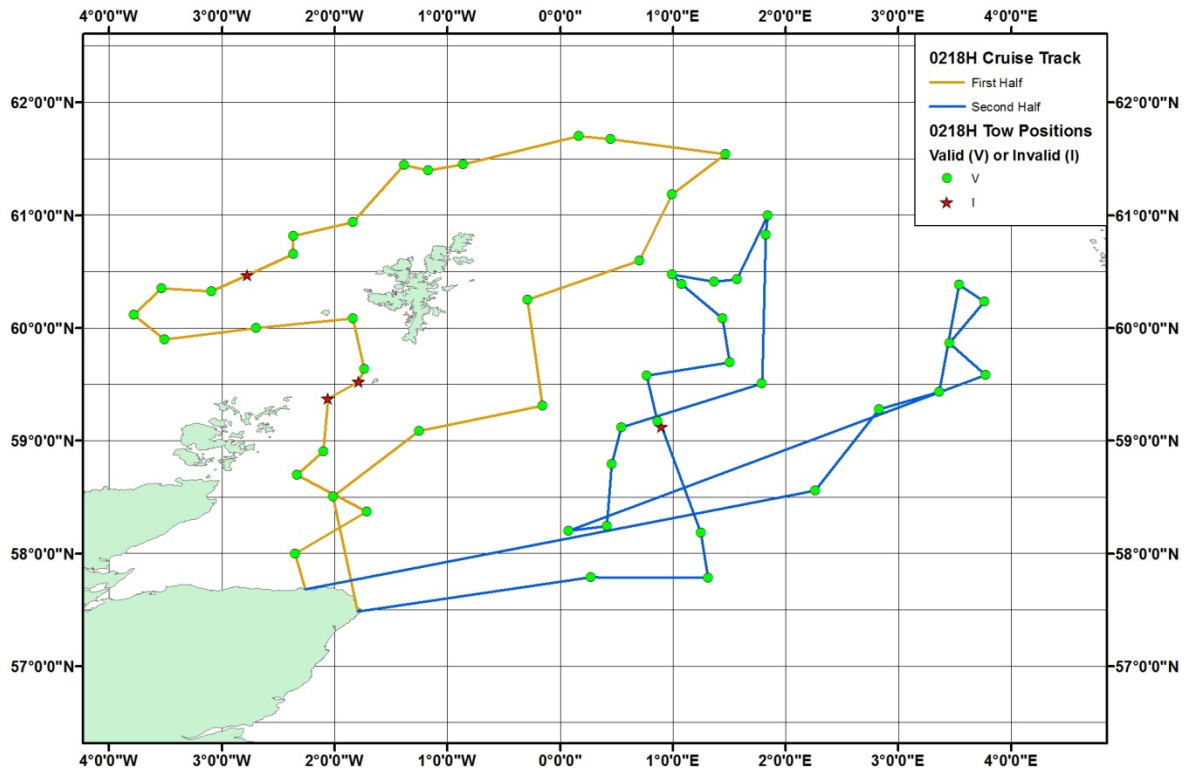


Figure 1: 0218H map showing cruise track and completed stations (51 valid and 4 foul)

Species Name	Biological Samples	Number Measured	CPUE No.s/h	CPUE Kg/h
Angler (<i>Lophius piscatorius</i>)	409	503	9.9	31.4
Black-bellied Angler (<i>Lophius budegassa</i>)	46	46	0.9	2.5
Cod (<i>Gadus morhua</i>)	400	2765	54.4	93.5
Four-spot Megrin (<i>Lepidorhombus boscii</i>)	10	21	0.4	0.1
Megrin (<i>Lepidorhombus whiffiagonis</i>)	127	834	16.4	9.4
Blue Skate (<i>Dipturus cf. flossada</i>)	1	1	<0.1	0.1
Flapper Skate (<i>Dipturus cf. intermedia</i>)	17	17	0.3	6.1
Shagreen Ray (<i>Leucoraja fullonica</i>)	2	2	<0.1	0.1
Starry Ray (<i>Amblyraja radiata</i>)	425	424	8.3	2.9

Table 1: Number of biological samples, measured fish and Catch Per Unit Effort (CPUE) of the species of recorded during 0218H.