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MRV *Scotia*

Survey 1314S

PROGRAMME

8-19 September 2014

Ports

Loading: Scrabster, 6 September 2014

Unloading: Aberdeen, 19 September 2014

In setting the cruise programme and specific objectives, etc. the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in Marine Scotland's Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the survey with staff on-board before work is commenced.

In the interest of efficient data management it is now mandatory to return the Survey Report, to I Gibb and the Survey Summary Report (old ROSCOP form) to M Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

Personnel

F Neat (SIC)
F Burns
J Drewery
R Kynoch
D Eerkes-Medrano
N Collie
M Stewart
E Dalgarno
G Packer
L Robson (Visitor, JNCC)

Project Codes: ST015 (MOREDEEP: 20276) 12 days

Gear

2 x Jackson BT 184 bottom trawls and wires
2 x 16 " rockhopper ground gear.
Ground-gear bag nets
2 pairs Morgere ovalfoil 1700 Kg trawl doors.
Scanmar trawl sensors, bottom contact sensor and depth/temperature logger (high pressure DST).
VMUX towed video chariot with HD camera system.
AquaTracka water profiler
Chemicals - Ethanol and formalin

Objectives

- 1) Visual survey of sponge grounds using HD VMUX in the Faroe-Shetland channel and at Rosemary bank.
- 2) Transects of trawls to document fish community from ~ 300 m to approx.1500 m at 100 m intervals in the Faroe-Shetland channel and at Rosemary bank.
- 3) Sample benthic fauna with trawl ground-gear bags in all areas.
- 4) Sample a range of species of fish and invertebrates for analysis of contaminants and sensory assessment.
- 5) Trial use of AquaTracka, including collection of discrete water samples.

General

Scotia will work the eastern slope of the Faroe-Shetland Channel (FSC) and the Rosemary Bank. Fishing operations will be generally carried out during daytime and visual surveys at night. Some flexibility in scheduling may be necessary to maximize the opportunity for visual survey during favourable weather conditions. Water sampling using the *AquaTracka* sensor will also be carried out on an opportunistic basis. *Scotia* will first head to the northern stations (Map 1) in the FSC (24 hr steam) and spend approximately five days working progressively south. Passage will then be made to Rosemary Bank for a further 2-3 days work before returning to Aberdeen (1.5 days steam).

Objective 1 – In the FSC three VMUX survey areas will be targeted; one in the north (approximately 61.5 N), one centre (approximately 61 N) and one in the south (approximately 60 N). In the FSC the sponge fields are situated between 400-600 m. Attempts will be made to undertake three 10 km transects at approximately 400, 500 and 600 m at each site. At Rosemary Bank the sponge fields are deeper (> 1000 m) on the eastern flank of the bank. We will attempt to determine the spatial and bathyl extent of the sponge fields.

Objective 2 – Trawling will be carried out at stations along depth contours between the 300 and 1,500 m isobaths at approximately 100 m depth intervals, except at those depths where the sponges are known to be present (generally 400-600 m in FSC and 1200-1300 m at Rosemary Bank). Transects will be made in the three areas in the FSC and at known trawl sites on Rosemary bank. All species of fish and invertebrates will be identified, weighed and measured. Biological sampling will take place concurrently. While some trawl sites are known, others may need to be sourced and some time may be needed to run the ground prior to trawl deployment.

Objective 3 – Benthic fauna will be sampled simultaneously with trawling by using ground-gear bags. All species will be identified, counted and/or weighed.

Objective 4 – A range of fish and invertebrates will be sampled for contaminant analysis and sensory assessment.

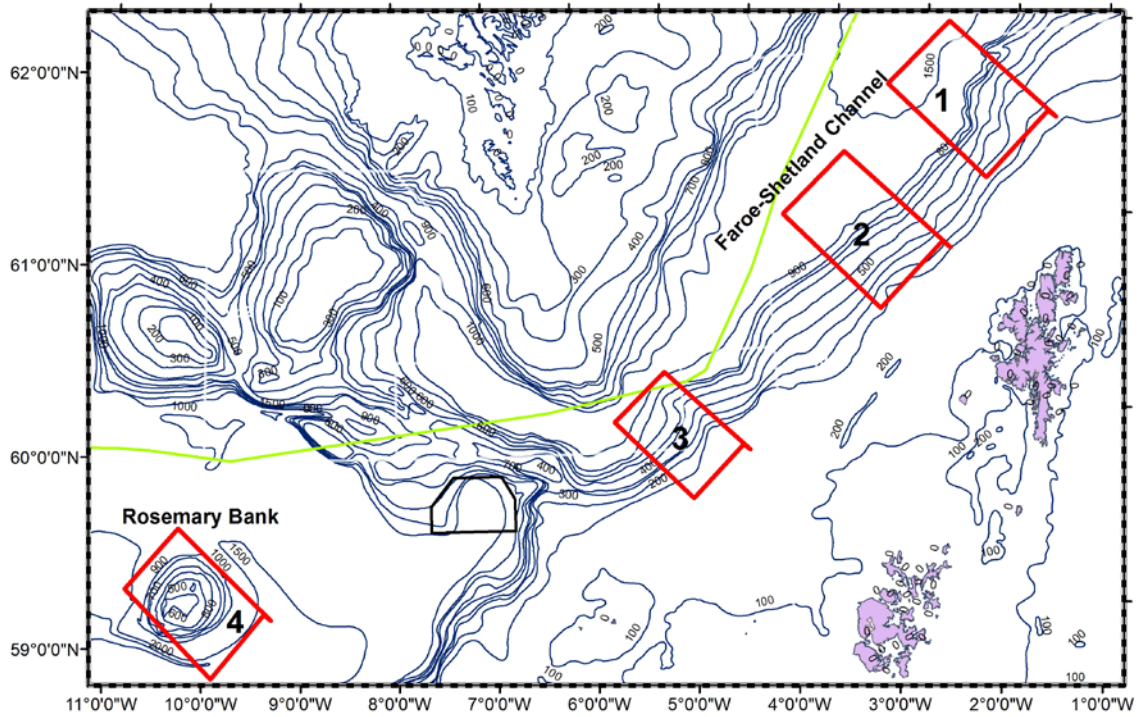
Objective 5 – The AquaTracka water sensor will be trialed and tested on an opportunistic basis.

Scotia will return to Aberdeen for unloading on the morning of 19 September.

Normal contact will be maintained with the Laboratory.

Submitted:
F Neat,
4 August 2014.

Approved:
I Gibb
27 August 2014



Map of 1314S Survey Area: Red rectangles are areas for trawl transects and VMUX surveys - to be completed in sequence. Three video transects per area are required and up to 10 trawls per area will be required to cover the depth range. All survey work will be within UK waters (UK limits shown in green line).