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FRV *Scotia*

Cruise 0711S

PROGRAMME

19 - 30 June 2011

Loading: Aberdeen, 15 June 2011
Sailing: Aberdeen, 19 June 2011
Unloading: Aberdeen 30 June 2011

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 cruise with staff on-board before work is commenced.

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

Project Codes: MP001 (OFFCON**)** 12 days

Personnel

F Neat (SIC)
F Burns
J Drewery
R Kynoch
J Augley
J Mair
P Copland
E Dalgarno
C Trigg (Visitor, SNH)

Gear

- 3 x Jackson BT 184 bottom trawls.
- 2 x 16 " rockhopper ground gear.
- 2 pairs Morgere ovalfoil 1700 Kg trawl doors.
- Net sensors; deepwater Scanmar trawl door spread sensors (2000 m), Scanmar wing spread sensors(1200 m), Scanmar headline height sensor (1200 m), speed sensor, bottom contact sensor and depth/temperature logger (high pressure DST).

- 6 x fish traps and buoys.
- Electronic fish tags and kit plus 2 water holding tanks.
- Swathe multi-beam echosounder, tide gauges and buoys.

Chemicals: Ethanol, formalin. MS222 (fish aneasthetic).

Objectives

1) Carry out a transect of trawls every 100m of depth from ~ 100 m to ~1800 m to assess bathymetric distribution of haddock and deepwater species including invertebrates.

2) Map areas of seabed within UK territorial waters using Swathe MBES (SNH).

3) Electronically tag cod and saithe (n = 17) for studies of their movements.

4) Assess presence of juvenile cod and saithe in shallow reef areas of the bank by using baited traps.

5) Collect otoliths of juvenile and adult gadoids for studies of chemistry.

6) Sample a range of species for analysis of contaminants (Marine Assessment).

General

Scotia will work the plateau area around the islet of Rockall and the deep slope to the east (see Map). Allowing four days steam to and from Aberdeen, seven full days and nights are expected on station. Fishing operations will be generally carried out during daytime and MBES mapping will at night. Given the extended daylight hours at this time of year, some flexibility in scheduling may be necessary to maximize the opportunity for MBES survey during favourable weather conditions.

Objective 1 - Trawling will be carried out at stations along depth contours between the 100 and 1,800 m isobaths at approximately 100 m depth intervals. Trawling will be during from approximately 0800 till 2000. Some known trawling positions will be covered; other new tows will need to be sourced especially from deeper areas. All species will be identified, weighed and measured. Biological sampling will take place concurrently.

Objective 2 – MBES survey will take place between hours of approximately 2100 and 0700. The target areas are within the UK territorial waters (12 nm from the rock) to a maximum depth of 300 m.

Objective 3 – Cod and Saithe for tagging will be trawled. Initially an area to the NE of the rock in approximately 150 m water depth will be targeted. Tows will be limited to 30 minutes duration at most, in order to maintain fish in good condition. It may also be possible to use fish from the traps for tagging purposes. Cod and saithe will be removed from the cod-end on deck and those in good condition placed into tanks underneath the hopper ramp supplied with non-toxic water.

Objective 4 – Fish traps will be deployed in the reef areas close to the rock in water depths between 60 – 130 m. It is anticipated that traps will be deployed and recovered between trawling and the MBES survey. Traps can be deployed from the hanger deck and recovered up the ramp. Fish and invertebrates will be identified, measured and sampled for otoliths and genetics.

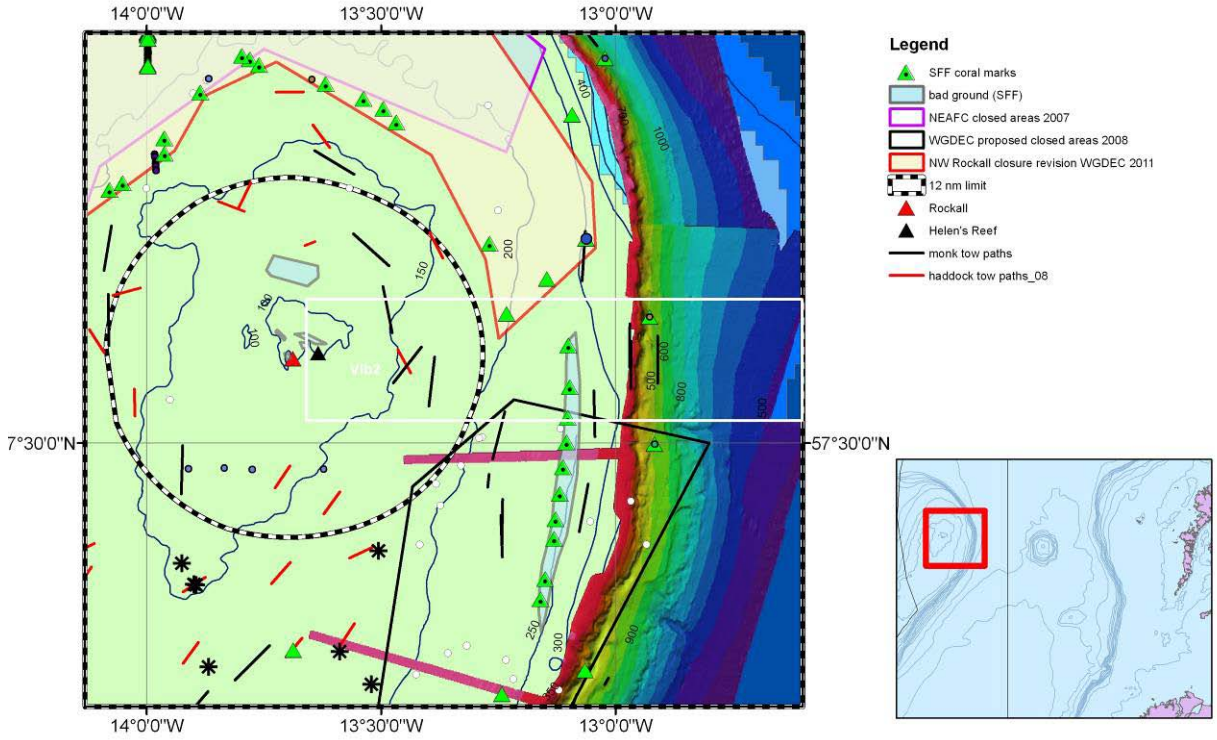
Objectives 5 and 6 – These will be carried out concurrently with trawl sampling. In particular prey species are required for contaminant sampling.

Scotia will return to Aberdeen on the morning of 30 June.

Normal contact will be maintained with the Laboratory.

Submitted:
F Neat
24 May 2011

Approved:
I Gibb
26 May 2011



Map of 0711S survey area – white rectangle will be area for transect of trawls from 100 m to 1800 m.