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MRV *Scotia*

Survey 0712S

PROGRAMME

16-27 June 2012

Loading: Aberdeen, 13 June 2012
Sailing: Aberdeen, 16 June 2012
Unloading: Aberdeen, 27 June 2012

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: SP001 (OFFCON: 20098) 12 days

Personnel

F Neat	(SIC)
F Burns	
J Drewery	
R Kynoch	
E Barreto	
D O'Sulllivan	
P Copland	
E Dalgarno	
L Clayton	(Glasgow University)
W Gatt	(SFF)

Gear

- 3 x Jackson BT184 bottom trawls
- 2 x 16 " rockhopper ground gear.
- Ground-gear and headline bag nets
- 2 pairs Morgere ovalfoil 1700 Kg trawl doors.

- 2 X Agassiz trawls (benthic sampling)

- 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).

- Swathe multibeam echosounder, sound-velocity profiler, tide gauges and dahn-buoys.

Objectives

1) Map areas of seabed within UK territorial waters using Swathe MBES.

2) Carry out a transect of trawls from ~ 300 m to maximum 1500 m at 100 m intervals on the western flank of the bank to assess distribution of haddock and deepwater species.

3) Sample benthic fauna using combination of ground-gear bags and Agassiz trawl.

4) 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 north and west (see Map). Allowing four days steaming 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 at night, but 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.

MBES target survey areas are within the UK territorial waters (12 nm from the rock) to a maximum depth of 200 m. Mapping will continue on from that achieved in 2011, working out from the islet of Rockall, joining up areas that were mapped last year.

Trawling will be carried out during daylight hours at stations along depth contours between the 300 and 1,600 m isobaths at approximately 100 m depth intervals. Transects will be made in two areas; the slope to the NW and the slope due west of Rockall (Areas 1 and 2 in Map 1). Trawl Area 1 is to be done first, then Area 2. Some known trawling positions will be covered (see map); 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.

Benthic fauna will be sampled simultaneously with trawling by using ground-gear bags. T his new technique will be compared to a traditional benthic sampling trawl (the Agassiz trawl) for comparison. Comparative tows will be undertaken only at shallower depths (300-500m).

Gear selectivity research will be undertaken for a sub-set of hauls at depth of around 1000 m. Fish escaping the gear both under the ground rope and over the headline will be quantified using additional bags.

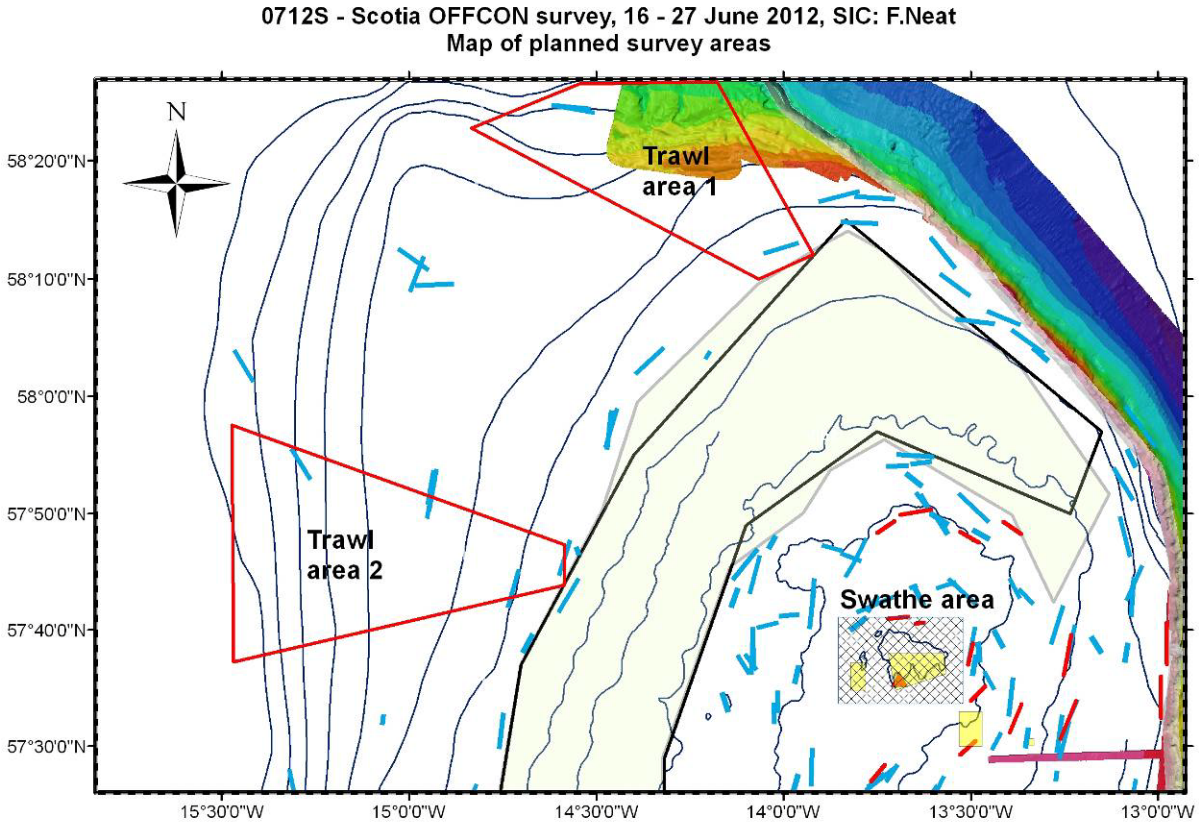
Scotia will return to Aberdeen on the morning of 27 June.

Chemicals: Ethanol and formalin.

Normal contact will be maintained with the Laboratory.

Submitted:
F Neat
May 2012

Approved:
I Gibb
June 2012



Map of 0712S survey area – Hatched rectangle will be area for swathe work (smaller yellow areas within this are the areas mapped last year). Transect of trawls from 100 m to 1500 m will be undertaken first in Area 1 and second in Area 2. Also shown are *Scotia* trawls from past surveys (blue and red lines).