

Not to be cited without prior reference to Marine Scotland, Marine Laboratory, Aberdeen

FRV *Scotia*

Cruise 1011S

PROGRAMME

24 August – 14 September 2011

Ports

Loading: Aberdeen, 19 August 2011

Half-landing: Ullapool, around 3 September 2011

Unloading: Aberdeen, 14 September 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.

Part 1: Rockall Haddock Survey

Personnel

F Neat (In Charge)

R Kynoch

J Drewery

M Gault

J Clarke

M Stewart

N Collie

C Ryan (Visitor – Marine Institute, Ireland)

J Moreno Navas (Visitor – Heriot-Watt University)

T Blasdale (Visitor – JNCC)

V Khlivnoy (Visitor – PINRO, Russia)

Part 2: Deepwater Slope Survey

Personnel:

F Neat (In Charge)

R Kynoch

J Drewery

L Allan

F Burns

E Barretto

E. Dalgarno

C Pinto (Visitor - Aberdeen University)

I Faria (Visitor - IPIMAR, Portugal)
C Ryan (Visitor – Marine Institute, Ireland)
T Blasdale (Visitor, JNCC)

Estimated Days per Project: 22 days – ST03t

Fishing Gear

GOV Trawl (BT 137) with ground gear D (Part 1)
BT 184 Deepwater trawl with 16 “ ground-gear and Morgere 1700 kg doors (monkfish)

Other Gear

CTD – Seabird 19+
VMUX towed TV chariot + cable
Reson Multibeam echosounder

Objectives Part 1

- To undertake the bottom trawl survey of haddock on the Rockall Plateau to depths of 400 m.
- To deploy a CTD at each trawl station to collect temperature and salinity profiles.
- To collect samples (genetics and otoliths) for key species for population studies, contaminant studies and other requests, e.g. MSFD litter recording.
- To map seabed habitats and coral reefs using towed VMUX chariot video system and/or the swathe multibeam echosounder.

Objectives Part 2

- To map the composition, distribution and abundance of continental slope species including invertebrates on the deepwater slope west of the Hebrides and Rosemary Bank to depths of 1800 m.
- To collect temperature at depth during all deepwater hauls using a data storage sensor attached to the trawl headline.
- To collect samples (genetics and otoliths) for key species for population and contaminant studies (Marine Assessment) and undertake any other sampling requests, e.g. MSFD litter recording.

Procedures Part 1

The primary objective of this part of the survey is to assess the state of the haddock stock on the Rockall Plateau. Although the Rockall haddock survey has existed for a number of years a new sampling design is currently being developed. Trawling will be carried out during the hours of daylight at randomly selected locations within the 400 metre contour. The exact locations of the trawling stations will be notified to the vessel at the commencement of the cruise. One haul of 30 minutes duration will be made at each sampling station; trawling operations will occur in waters to a maximum depth of 400m. Daily start times for survey stations will be at approximately 0600h and continue until approximately 2000h. The

Scanmar system will be used to monitor wing spread, door spread and distance covered during each haul. A bottom contact sensor will be mounted on the footrope to record the distance of the trawl off the seabed. Catches will be worked up according to the protocols for International Bottom Trawl Surveys and in line with MSS Standing Instructions. A CTD will be deployed at each trawl station.

At night the VMUX towed video chariot will be deployed in and outside areas closed for the protection of coldwater coral reefs and in areas of interest identified within the 12 mile limit of the islet of Rockall. In the case of weather conditions curtailing deployment of the VMUX, the swathe MBES will be considered as an option for opportunistic mapping of the seabed building on previous swathe mapping of the area. Upon completion of the Rockall haddock survey, passage will be made to Ullapool for half-landing on or around 3 September. The GOV net and associated gear will be stripped down and offloaded together with TV kit at Ullapool in exchange for the deepwater trawl gear.

Procedures Part 2

The deepwater slope survey will commence 24 hours after coming into Ullapool and proceed south trawling the shelf slope between 500-1800 m. The primary objective is to map the composition, distribution and abundance of fish species on the deepwater slope west of the Hebrides. Trawling will mainly be at fixed stations at 500, 750, 1000, 1500 and 1800 m. In square 44EO additional stations at intermediate depths will be undertaken. Trawl duration will be 1 hour. The exact locations of the trawling stations will be notified to the vessel at the commencement of the cruise. No CTD deployments will be made. If time permits trawl stations on Rosemary bank will be conducted as has been done in previous years. The schedule has been set under the WTD and the expectation is that trawling will be conducted within the hours of daylight. It may be necessary to trawl at night if daylight fishing time is lost due to poor weather or other problems, but the night-time will mainly be spent in passage from one sampling area to the next. From all tows the entire catch will be sorted, weighed and length-frequency data collected. Benthic invertebrate by-catch will also be recorded. A ground gear bag will be attached on certain tows for sampling of benthos. Additional sampling to be carried out as outlined in the objectives.

Scotia will return to Aberdeen on the morning of the 14 September.

Normal contacts will be maintained with the Laboratory.

Submitted:
F. Neat
19 July 2011.

Approved:
I Gibb
13 August 2011.

Not to be cited without prior reference to Marine Scotland, Marine Laboratory, Aberdeen

FRV Scotia

Survey 1011S

24 August – 14 September 2011

PROGRAMME AMENDMENT

J Moreno Navas (Visitor – Heriot-Watt University) will not be joining the vessel for part 1 of survey 1011S.

I Gibb
22 August 2011