

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

MRV *Alba na Mara*

Survey 1212A

PROGRAMME

8 – 25 July 2012

Ports

Loading: Fraserburgh - 4 July 2012

Half Landing: Shetland – date flexible

Unloading: Fraserburgh - 25 July 2012

In setting the survey 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:

K Summerbell SIC

J Mair

J Clarke

N Aldridge

Costs to Project: 18 days – 20141

Fishing Gear:

- BT 204 Jackson Rockhopper 2T trawl
- 3 x 83mm codends
- 600mm netting panels
- Trawl doors
- Groundgear, tickler chain, sweeps, bridles, backstrops, pennants, floats
- Patching and twine
- Scanmar (headline height/depth, wing spread, door spread, double distance "panel" spread & bottom contact)

Scientific Equipment:

- Cameras (4 x Navigators), Flashback recorders and housings
- Lights, batteries and housings
- Camera frames (6 x pyramid design)
- Catch bins
- Catch sorting table

Objectives:

1. Conduct selectivity gear trials with large mesh panels fitted in the side netting of the trawl, aiming to release cod but retain megrim and monkfish.
2. Quantify the geometry of the two compartments in the mouth of the trawl, and the trawl overall.
3. Obtain video footage of the panels in operation.

Protocols

Equipment will be loaded at Fraserburgh on 4 July 2012, and the trawl will be rigged onto the net drum. Staff will travel to Fraserburgh on the morning of 8 July. The vessel will then travel to Muckle Flugga in the Shetland Isles. Trawling will be conducted in waters around Shetland, with Flugga and Baltasound fishing grounds being the preferred areas (Fig 1). A rest day for scientific staff will be held at the nearest harbour at a convenient point during the survey. Alba will return to Fraserburgh where the survey will end on 25 July 2011.

Trawling Operations

The new "2T" trawl is based on the 370 Rockhopper trawl (Jackson Trawls Ltd). It has a vertical separating panel fitted down the centre, from the headline/footrope tapering back to the 3rd panel of the trawl. The trawl then splits into two separate tunnel sections, finishing in separate 83mm codends. This enables one side to be modified by inserting large mesh panels into the side netting (either side of the selvedge) (Fig 2). The catch data from this test side can then be compared against the catch data from the unmodified control side. To assess whether cod can be released from the trawl while still retaining megrim and monkfish. Three configurations of large mesh panels will be tested during the cruise.

During all hauls scanmar instrumentation will be fitted to ensure the trawl is fishing symmetrically, and that both test and control compartments are quantified. Video cameras and lights will be fitted to the headline for at least one haul of each panel configuration. This will confirm the trawl and panel netting are taught and fishing correctly.

Depending on the catch rates of the target species (cod, megrim and monkfish) fishing tows may be up to 4 hours long, allowing two or three hauls per day. A tickler chain will be fitted during all hauls. Half-height bins will be used on deck for receiving and storing the catch from the separate codends. The catch will be sorted into key species, weighed and individual total length measurements recorded.

Any marine litter brought onboard during trawling operations will be documented and photographed before being placed into "KIMO Fishing for litter" bags. At the end of the cruise the bags will be deposited safely on the quayside to then be collected for disposal.

Normal contacts will be maintained with the laboratory.

Submitted:
K Summerbell
4 June 2012

Approved:
I Gibb
4 July 2012

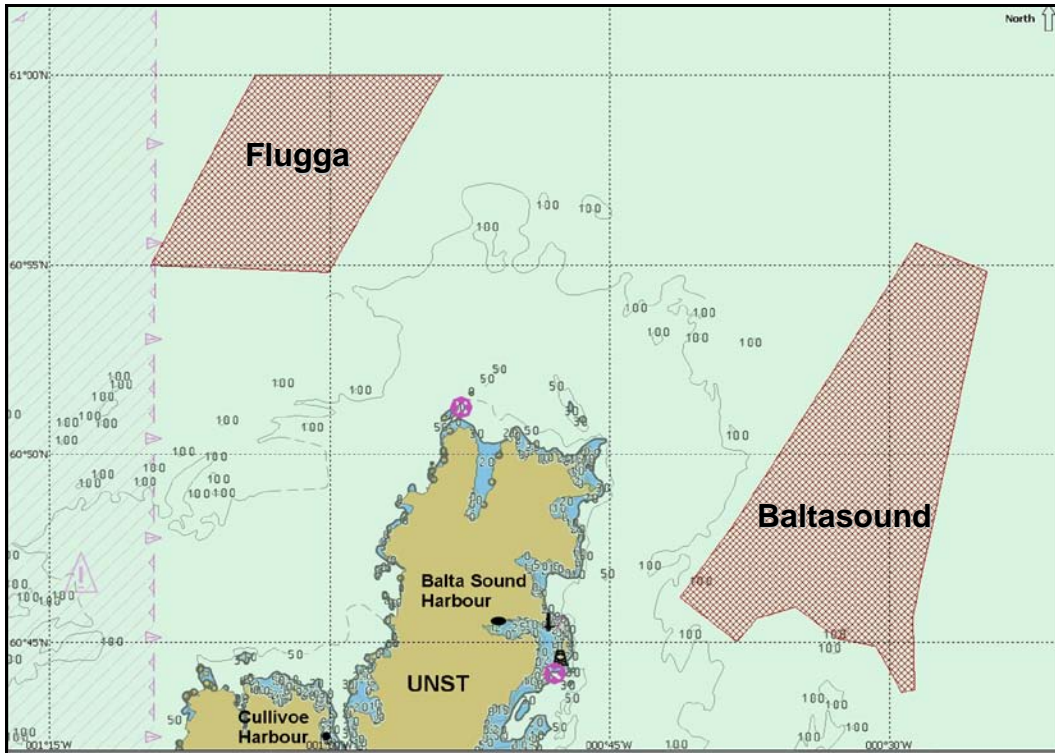


Figure 1: Preferred fishing grounds.

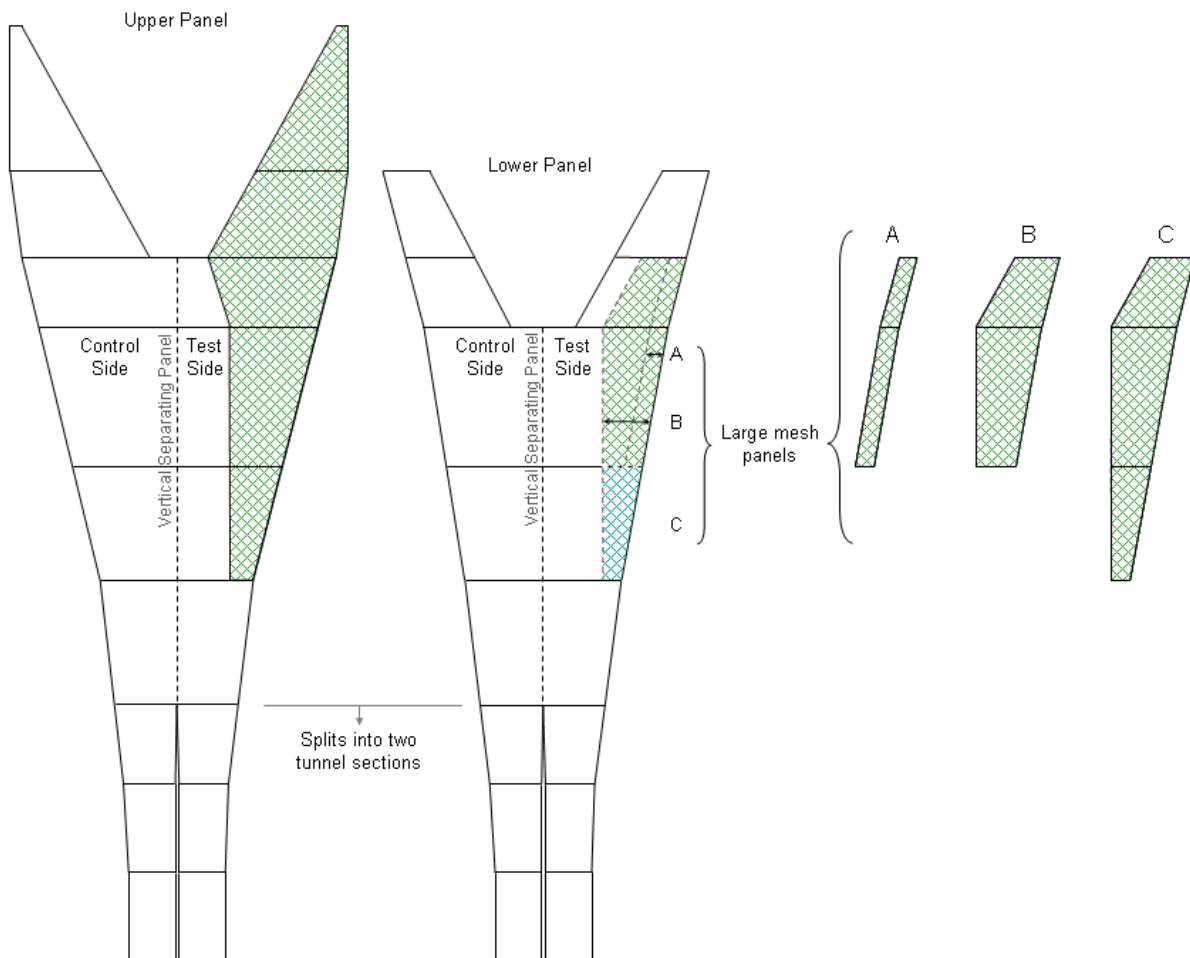


Figure 2: Net plan of 2T trawl, diamond shading indicating possible areas of 600mm mesh.