

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

MRV *Scotia*

Survey 1122S

PROGRAMME

14-26 September 2022

Ports

Loading: Ullapool 13 September 2022

Unloading: Aberdeen 26 September 2022

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 Summary Report a nil return is required, if appropriate.

Rockall Haddock Survey

Estimated Days per Project: 13 days – ROCHAD/20729

Fishing Gear

GOV Trawl (BT 137) with ground gear D.

Camera Gear

VMUX towed video chariot and / or dropframe with HD camera system and integrated CTD. Ranger 2 USBL positioning system.

Other Gear

RBR Concerto³ CTD.

Objectives

- To undertake the bottom trawl survey of haddock (*Melanogrammus aeglefinus*) and other species covering Rockall Bank to a depth of 350 m.
- To deploy a CTD at selected trawl stations to collect temperature and salinity profiles.
- To undertake broad-scale habitat mapping in nearby UK / NEAFC-designated protected areas and/or other features of interest.
- To record marine litter at each trawl station for MSFD.

Procedure

The primary objective of this part of the survey is to assess the state of the haddock stock on the Rockall Plateau. The Rockall haddock survey employs a semi-random stratified design over four depth-bounded sampling strata to a maximum depth of 350 m. Sampling intensity within each of the four strata reflects the fish density observed in each of these during previous surveys. Trawling will be carried out, as far as possible during the hours of daylight, at random

locations within each strata. Forty primary trawl positions have been generated and their allocation within each depth stratum is displayed in Figure 1. The number of stations within each depth strata for 2022 is as follows: 0-150 m stratum: 4 stations, 150-200 m stratum: 21 stations, 200-250 m stratum: 10 stations and the 250-350 m stratum: 5 stations. *Scotia* will undertake a trawl within a five nautical miles of each station where possible or, failing that, choose an alternative. A further 20 secondary random stations across the various strata have been generated to provide a source of additional and/or alternatives should any primary station prove unfishable. Where time allows additional hauls will be conducted outside our strata (at depth range 350-500 m) and ten positions have been picked for this eventually. The survey does not intend undertaking trawls inside protected areas other than the Rockall Haddock Box (RHB). The relevant regulatory body (NEAFC) in the case of RHB has been informed in advance.

One trawl of 30 minutes duration will be made at each sampling station. Daily start times for survey trawl stations will be at approximately 0600 hours and continue until approximately 1800 hours; these hours though must be considered adaptive. The Scanmar system will be used to monitor and record wing spread, door spread and distance covered during each haul. A bottom contact sensor will be mounted on the footrope to monitor seabed contact. Catches will be worked up according to the protocols for International Bottom Trawl Surveys.

Conditions permitting *Scotia* will switch to broad-scale habitat mapping outside the hours of trawl survey using HD cameras mounted on towed underwater vehicle (VMUX chariot) or dropframe. Exact locations of habitat mapping will be provided on a daily basis subject to assessment of survey progress and prevailing conditions.

Logistics and sea conditions permitting, an acoustic monitoring mooring deployed at a depth of 298m at position 56° 35.97N, 14° 18.00W will be recovered.

A CTD will be deployed at selected trawl stations to collect environmental data.

Normal contacts will be maintained with the Laboratory.

Submitted:
J Drewery
03 September 2022.

Approved:
I Gibb
07 September 2022

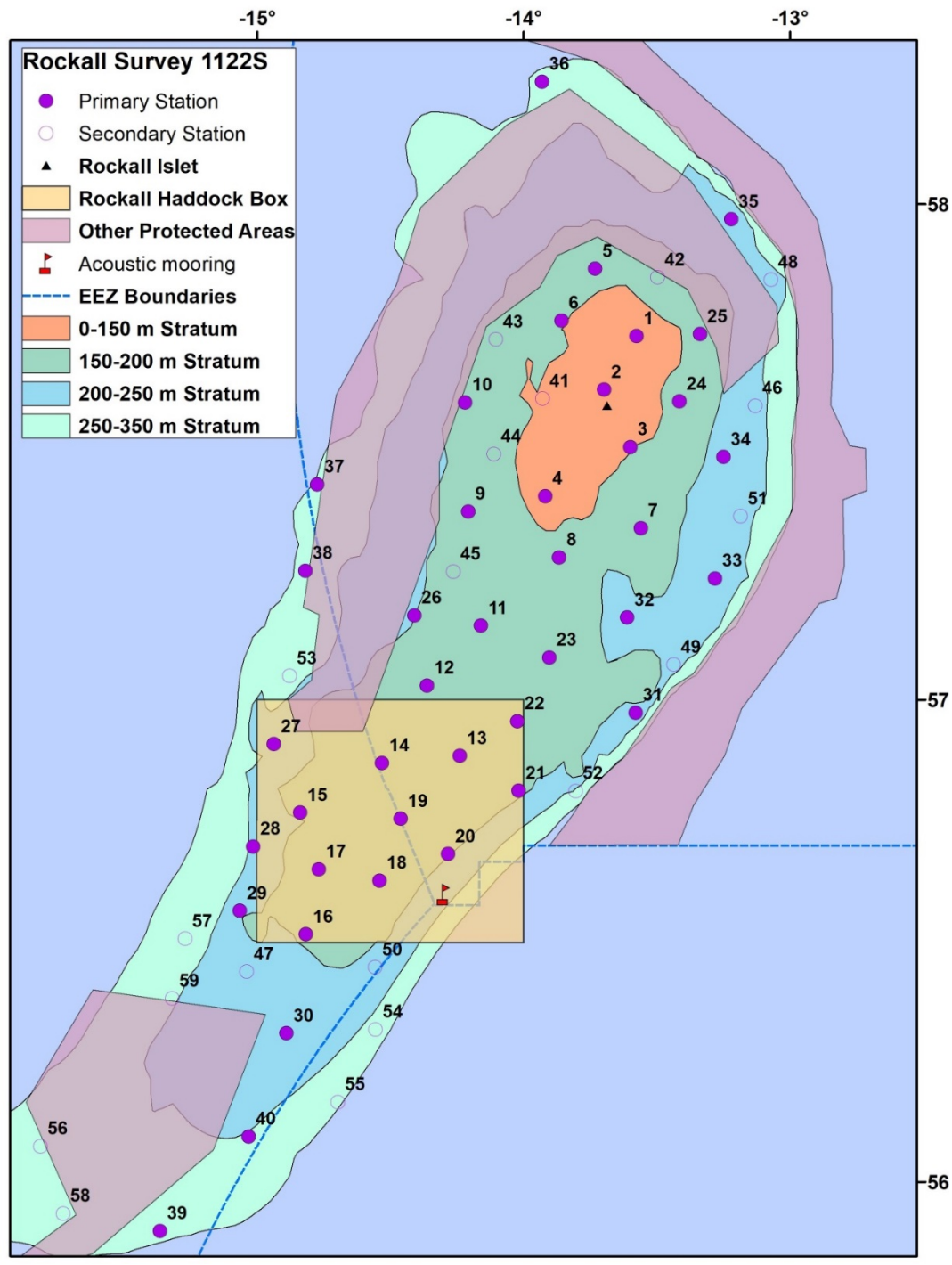


Figure 1: Survey map showing sampling strata, the Rockall Haddock Box, other protected areas along with the nominal locations of all random trawl stations generated for 1122S, and the acoustic mooring retrieval site.