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

MRV Alba na Mara

Survey 1916A

PROGRAMME

15 - 31 October 2016

Ports

Loading: Greenock, 13 October 2016 **Departure:** Greenock, 15 October 2016 **Unloading:** Fraserburgh, 31 October 2016

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

E. Armstrong (SIC)

L. Ritchie

G. McAllister

J. Lawrence Visitor: Aberdeen University

Project: SU02NP (20158) - 17 days

Objectives

- 1. To conduct an acoustic survey designed to survey both the open and enclosed areas of the Clyde to ultimately provide an estimate of the abundance and distribution of herring and sprat.
- 2. To obtain samples of herring and sprat for biological analysis, including age, length, weight, sex, maturity and ichthyophonus infection.
- 3. All other species caught will be measured for length and weight to establish a length weight relationship.
- 4. CTD profiles will be taken at the end of each trawl.
- 5. Data will be gathered on cetaceans using a towed passive acoustic array.

Procedure

Fishing gear will be transported to Greenock by lorry on 13 October and loaded onto the vessel. Scientific staff will travel by lab vehicle to join the vessel in Greenock on 14 October. The vessel will commence the survey on 15 October at the earliest opportunity once all relevant safety drills have been completed.

The survey will be carried out within an area bounded by approx. 55°N to 56°N and 04° 40′ W to 05° 40′ W. Echointegration will be carried out at 38, 120 and 200 kHz. Data gathered in the hours of darkness will not be used for stock assessment. Trawling operations will be carried out as and when marks are identified. Otoliths will be collected from a sub-sample of the herring and sprat to determine age. The maturity state and presence of Icthyophonus infection will also be recorded.

A CTD profile will be taken at the end of each trawl.

The track will be similar to that carried out on the previous surveys, given below (Figure 1).

A passive acoustic array will be towed during the survey, to detect the presence of cetaceans throughout the survey area.

TSG data will be gathered during the survey.

The survey will involve following a pre-set survey pattern, at a steaming speed of 8 knots. At the end of the survey the vessel will aim to be in Fraserburgh for the morning of the 31 October. Staff will return to the laboratory on 31 October by minibus.

Normal contact will be maintained with the Marine Laboratory.

Submitted: E. Armstrong 3 October 2016

Approved:

I. Gibb

3 October 2016

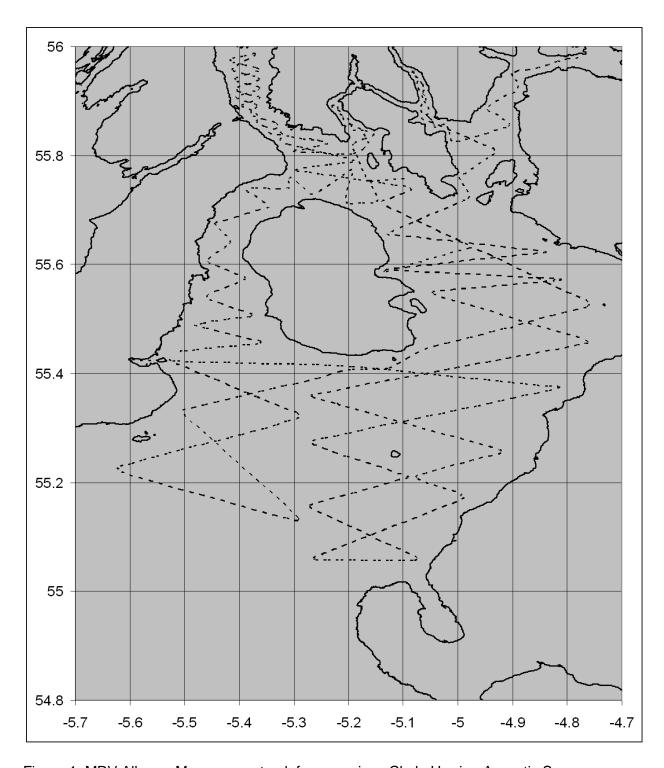


Figure 1. MRV Alba na Mara survey track from previous Clyde Herring Acoustic Surveys.