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## MFV Altaire (LK429)

Survey 0119H

### **PROGRAMME**

19 March – 1 April 2019

#### **Ports**

**Loading:** Ullapool, 18 March 2019 **Unloading:** Ullapool, 01 April 2019

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.

Out-turn days: 14 - RV1904 / 20529

## Fishing/Sampling Gear

Vessel's own pelagic trawl
Gulf VII plankton sampler with mounted seabird 19+ CTD

# **Objectives**

- 1. To carry out mackerel egg survey (ICES Triennial Survey), on the western shelf and shelf edge in the area from 53°N to 59° N (see Figure 1).
- 2. To collect fish samples, by trawling, for atresia and fecundity analysis back at the laboratory.

#### **Procedures**

After sailing from Ullapool, the vessel will proceed to the first plankton station line at 58° 45′N 8°15W. Subsequent stations will be taken along the same line west at 30′ intervals. Transects will be at 1°S with stations at 30′ E/W intervals. Plankton samples will be taken using the Gulf VII sampler with mounted CTD to record salinity and temperature parameters during the tow.

The plankton tows will require the vessel to deploy, then proceed to tow the sampler at five knots. The sampler will then be lowered at a steady rate (10m/min) from the plankton crane to within 5 m of the seabed or 200 m – whichever is shallower. The sampler will then be recovered at the same speed. Once aboard, plankton samples will be washed from the sampler net, fixed in formalin and scored for egg abundance. Trawl samples will be taken at the discretion of the scientist in charge and will usually be taken at the shelf edge. Fishing will

be targeted on the capture of samples of mackerel and horse mackerel for biological samples. It is expected that there should be a maximum of ten trawls for the whole survey.

Note that the precise length of each transect cannot be defined in advance as this survey uses an adaptive design, where sampling along a line will continue until there are no eggs or very small numbers of eggs encountered. The overall survey plan will be dictated according to the results that are recorded as the survey proceeds.

Normal contact will be retained with the laboratory throughout, and with other vessels taking part in the survey.

Submitted: J Drewery 04 March 2019

Approved: I Gibb 12 March 2019

**Figure 1:** Approximate overall survey area (purple). The survey area is bounded by 53-59°N and approximately 08-15°W. The exact western extent of survey will be dependent on egg catch.

