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Not to be cited without reference to the FRS Marine Laboratory, Aberdeen

FRV Alba na Mara

## Cruise 1308A

#### **PROGRAMME**

20 November – 1 December 2008

**Loading:** Fraserburgh, 17 November **Unloading:** Fraserburgh, 1 December

## Summary of working areas:

Hydrographic work in (and offshore from) sea lochs bordering the Minch and Shetland Voes.

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 FRS' 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 Iain Gibb and the Cruise Summary Report (old ROSCOP form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

#### Personnel

Matt Gubbins SIC George Slesser Malcolm Rose Matt Geldart

Project codes: AE11s - 12 days

## **Equipment**

Proteus workboat and 100 L unleaded fuel Sealogger CTD/Rosette Nutrient analyser Day grab / wooden table Zooplankton 'bongo' net

# **Objectives**

- 1) To collect water column hydrographic data from approximately 20 sea lochs in the North Minch and Voes in Shetland to provide validation / forcing data for models of fish farming carrying capacity.
- 2) To continuously monitor T&S and chlorophyll a in surface waters and surface irradiance during the cruise.
- 3) To sample zooplankton from a range of sea lochs to provide further information on sea loch community types.

#### **Procedure**

All gear will be loaded onto the vessel on 17 November. Scientific staff will join the vessel on 20 November. Survey work will commence on the West coast before travelling to Shetland to continue the survey in Shetland voes. The survey will aim to cover approximately 20 sea lochs and voes – details to be provided at the start of the cruise.

Within each loch, hydrographic sampling by CTD/Rosette will be undertaken at 2 stations and a further station will be sampled in the open sea outside each loch / voe. The parameters measured at each station will be:

- Nutrients
- CTD
- Chlorophyll a
- Dissolved oxygen
- Transmission and optical properties: PAR, CDOM and SPM
- Zooplankton (two stations per loch only)

For stations in sea lochs / voes that *Alba na Mara* cannot access, the workboat Proteus will be launched to undertake the required survey work.

Following the completion of survey work in Shetland, *Alba na Mara* will return to Fraserburgh for unloading on 1 December.

Submitted M Gubbins 19 October 2008

Approved I Gibb 23 October 2008