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Charter Fishing Vessel *Helenus* (FR 121)

Charter Cruise 2301H

REPORT

2-7 ~~December~~ 2001

Project Title: Gadoid Survey - West Coast No 1

Personnel

- M Breen - (In-charge) -
- K Summerbell
- C Stewart

Objectives

To collect biological data on the gadoid populations (cod, haddock and whiting) at two geographically contrasting sites:

Inshore - North Minch (57°50'N 05°55'W)

Offshore - Butt of Lewis (58°50'N 06°20'W)

This charter is one of a series of surveys in both the North Sea and off the west coast of Scotland. These surveys are to be performed bi-monthly and the collected data will allow:

- Comparison of inshore and offshore gadoid populations, with respect to size structure, growth, age composition and condition indices;
- Description of temporal variation in these condition indices; and
- Development of unbiased bi-monthly growth curves for the target gadoid species.

This project will be conducted as a preliminary exercise to assess the feasibility of using commercial vessels to supplement the collection of biological data on key commercial stocks.

Narrative

Staff and equipment were transported to Fraserburgh on 2 December 2001, where the vessel *Helenus* (FR 121) was joined and loaded at 1600 hours. Once the vessel and gear was prepared the *Helenus* left the harbour and proceeded to the 'Inshore' sampling station (North Minch (57°50'N 05°55'W)). This was the first of two sampling stations (inshore and offshore) to be visited in this survey. These stations correspond to stations already sampled by the annual ground fish surveys. Each station was visited bi-monthly and sampled using a trawl fitted with a small mesh (35 mm) cod-end liner. The trawl was towed for ~1 hour at a relatively fast towing speed (~3.5 knots), to ensure the capture of large specimens. Data was collected for three target species cod, haddock and whiting. These data included: catch per haul, length, weight, age, sex,

maturity, somatic weight and liver weight. In addition environmental data was recorded for each haul including: water temperature, fishing depth, light levels and sea-state. Finally, samples of ovarian tissue were collected from mature female cod for histological analysis.

The *Helenu*s arrived at the inshore station at 1645 hours on 3 December 2001 and immediately began the first sampling haul. A further three hauls were completed at this sampling station the following day. The vessel left the grounds at 2330 hours on 4 December and proceeded to the offshore station (Butt of Lewis (58°50'N 06°20'W)). Sampling at the offshore station began the following day at 0700 hours and a total of three hauls were completed that day. The final haul was made the following day and the vessel left the grounds at 1430 hours on 6 December 2001, arriving at Fraserburgh at 0830 hours the following morning. The vessel was unloaded at 0930 hours on 7 December 2001 and staff and equipment were returned to Aberdeen.

J A Morrison
22 April 2002