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Charter Fishing Vessel *Helenus* (FR 121)

Charter Cruise 2101H

REPORT

11-16 November 2001

Project Title: Gadoid Survey - North Sea No 1

Personnel

M Breen (In charge)

K Summerbell

J Mair

Objectives

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

Inshore - Buchan Deep (57°30'N 01°02'W)

Offshore - Beryl Field (59°38'N 01°45'E)

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 Peterhead on the afternoon of 11 November 2001, where they met the charter vessel (*Helenus*, FR121) at ~1900 hours. After loading and preparing the vessel, the *Helenus* left Peterhead harbour at 2200 hours and made its way to the "Offshore" sampling station (Beryl Field (59°38'N 01°45'E)). The vessel arrived at the first sampling station at ~1700 hours, where the first haul was shot away. Each haul during the survey was made using the vessel trawl fitted with a 35 mm codend liner. The trawl was towed for ~1 hour at a relatively fast towing speed (~3.5 knots), to ensure the capture of large specimens. Weather conditions were poor (force 7) during and after this first haul, making the processing and particularly weighing of the sampled catch difficult.

Conditions had improved a little the following day, when a further three one hour hauls were sampled. The vessel left the sampling station (at 2045 hours) after haul 4 and proceeded to the inshore site (Buchan Deep (57°30'N 01°02'W)) arriving the following day (14 November 2001) at 1230 hours. Four hauls were taken in this area over the next two days, after which the vessel returned to Fraserburgh harbour at 2200 hours on the evening of 15 November 2001.

Data was collected during each haul for three target species cod, haddock and whiting. This 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 taken from mature female cod for histological analysis.

The vessel was unloaded on the morning of 16 November 2001, when staff and equipment returned to Aberdeen at ~0930 hours.

J A Morrison
22 April 2002