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Charter Vessel MFV *Helenus* (FR 121)

Charter Cruise 3201H

REPORT

3-8 February 2002

Gadoid Survey - West Coast No 2

Vessel's Tel: 07786 000154

Agent's Tel: 01779 474231

Personnel

M Breen (In charge)
K Summerbell
I Penny

Objective

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 were transported to Fraserburgh on the afternoon of 3 February 2002, where they joined the vessel (*Helenus*, FR121) at 1830 hours. The vessel left the harbour 1845 hours and proceeded to the "Offshore" sampling station (Butt of Lewis (58°50'N 06°20'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. The programme was for each station to be 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 Offshore station at 1430 hours on 4 February 2002 and began the first sampling haul immediately. During the processing of the catch from this first haul, weather conditions deteriorated significantly. It was necessary then to steam inshore towards Lewis, in order to find a lee from the prevailing weather (south-westerly), where processing was resumed at 2100 hours. Further sampling at this site was abandoned temporarily due to the poor weather conditions and the vessel headed south to the inshore station (North Minch (57°50'N 05°55'W)). The first haul at the inshore site began the following day at 0730 hours and total of three hauls were completed before the vessel returned to the offshore site at 2130 hours on 5 February 2002.

A further two hauls were completed at the offshore site. But for each haul the vessel had to steam south, to the coastal waters off Lewis, to obtain a lee from the prevailing weather (south-westerly) in order to process the catch. The *Helenu*s left the sampling station at 0030 hours on 7 February 2002 when further deterioration in weather conditions prevented further sampling. The vessel arrived at Fraserburgh at 2130 hours on 7 February 2002. It was unloaded on the morning of 8 February 2002, when staff and equipment were returned to Aberdeen.

Mike Breen
12 April 2002