

Cruise Report
FRV 'Clupea'
9 - 13 May 1977

Objectives

- 1) To undertake a survey of the Pandalus borealis stocks on the Fladen ground.
- 2) To assess, using underwater cameras and television the density, and to observe the behaviour of Pandalus.
- 3) To undertake a Pandalid larval survey.

Narrative

Trawl and photographic equipment was loaded on board 'Clupea' on 9 May, and she sailed for Fladen at 1550. A series of Gulf III stations were worked while on passage.

On Fladen a series of four 1 hour and four 2 hour hauls were made with a Danish 1500 mesh shrimp trawl with small mesh whole cod-end cover. Two WP3 plankton tows were done. An underwater TV camera was towed on a sledge, and an attempt was made to take photographs using stereo camera equipment.

'Clupea' left Fladen because of deteriorating weather conditions and arrived back in Aberdeen at 2330 on 12 May.

Results

a) Trawling: Shrimp catches were variable, a total of 152 kg being caught with catches ranging from 0.5 kg to 33 kg per one hour tow. Very little of the shrimp catch passed through into the cover. A limited comparison of day and night time fishing was made. A two-hour daylight tow, which yielded 30 kg of shrimps, was repeated during the hours of darkness. The second tow yielded only 1 kg of shrimp.

Nephrops were scarce, except in one haul when 13 kg were taken; of these 445 were males with a mean carapace length of 30.0 mm, and 312 females with a mean carapace length of 26.7 mm.

Cod was the predominant fish caught, with lesser quantities of haddock, monk and whiting. Large quantities of small fish, mainly Norway pout, were also taken.

b) Photographic work: A low light underwater television camera was attached to a sledge and towed over the ground. Limited observations were made because of the time available. An attempt was made to take comparative photographs of the bottom using a stereo camera system, but this had to be abandoned because of weather conditions.

c) Larval survey: A series of eleven Gulf III plankton stations were worked while on passage to the grounds, and two WP3 hauls were worked on the grounds. Plankton samples from these hauls will be examined for pandalid larvae.

F G Howard
13.6.77

Seen in draft G Geddes