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R.V. ERNEST HOLT

Report for Cruise 3/1969

Staff:

J. G. Cattley
I. L. Davies
D. J. Smith
N. D. Pearson

Duration:

4-10 March

(All times B.S.T.)

Aims

1. To use the acoustic arch fitted along the headline of a bottom trawl in the North Sea.
2. If time permits to carry out shooting and hauling trials with the Engel trawl, using various rigs of backstrops, pennants and bridles.
3. As dictated by progress and conditions a number of suitable live flatfish of various species will be collected from Flamborough Off Grounds for Dr. Purdom.

Narrative

ERNEST HOLT sailed from Grimsby at 1830 hours, 4 March, and proceeded to the position 54°50'N, 3°50'E in the Clay Deep where at 1015 hours, 5 March trials with the acoustic arch fitted to the headline of a Granton trawl were commenced. During 5 and 6 March, seven hauls of 1 to 2 hours duration were carried out in calm to moderate conditions using a varying number of transducers on the headline up to a maximum of five. Catches were light but sufficient for the work in hand. During the last haul on 7 March the power on the cable winch failed and the cable had to be paid out and towed on the brake and hand hauled. It was found that the mains supply cable to the winch had broken down. This was replaced by a thicker cable during the evening, but on the morning of the 8th it was ascertained that the inductive coupling of the cable winch had seized. Further work with the acoustic arch was, therefore, abandoned.

During the afternoon of the 7th shooting and hauling trials were carried out with the 800 mesh, 2 panel Engel trawl. By the evening, however, the weather deteriorated so that we laid overnight. On 8 March the wind increased S.W. to W. to N.W. 6-7 and we steamed at half speed towards the Flamborough Off Grounds. At 0900 hours, 9 March, further trials with the 800 mesh, 2 panel Engel trawl were begun, these being completed by the end of the morning.

During the afternoon and evening of 9 March a number of hauls with the Granton trawl were carried out for various species of flatfish for Dr. Purdom and the laboratory hatchery. ERNEST HOLT docked at Grimsby at 0945 hours, 10 March.

Results

1. Work on the acoustic arch was encouraging but indicated that further work is needed on the receiving side.
2. Successful trials were carried out with the Engel trawl using backstrops, G-links and recessed links.

3. Plaice, lemon soles and dabs were collected for Dr. Purdom and the laboratory hatchery.

4. Selected ship meteorological observations were made at synoptic hours during the cruise; also wave recorder instrumental observations.

J. G. Cattley
10/3/69

Seen in draft: E.A.B., G.W.A.

Initialed: A.J.L.

Distribution: Basic list, plus the following:-

I. L. Davies
D. J. Smith
N. D. Pearson
R. B. Mitson
C. R. Hood