

Not to be cited without prior reference to the laboratory

Charter Vessel 'Aries' BCK 126

Report

20 September to 2 October 1987

Personnel

J Main	SSO
G Sangster	HSO
W Mojsiewicz	SO 1st Week
E Coroon	Craftsman 1st Week

Objectives

1. To observe twin BT 160 trawls with hoppers using a two warp system.
2. To observe fish reactions to a new centre skid which will produce a good sand cloud and keep the supporting wires off the bottom.
3. To recover the 5 underwater fish cages left from a previous cruise in August.

Narrative

The 'Aries' arrived at Gairloch at 0800 hours on 21st September where the twin trawls and diving gear were prepared and loaded onboard. The vessel worked daily from Gairloch during the first week allowing only limited diving on the trawls on the Melvaig Tow. The fish in the cages were examined, filmed and counted before recovering the cages.

During the second week the vessel worked in the Minch finishing 20 miles NE of the Butt of Lewis. One haul was made off Whiten Head on the North Coast before proceeding to Buckie to land the catch and off-load the trawls.

The trawl gear was returned to Aberdeen by lorry on Friday 2nd October

Results

With the strong winds and big swell, it was impossible to use the underwater vehicle so free diving techniques were used to collect measurements, observations and video-film of the trawls.

The BT 160 twin trawls worked well giving a satisfactory geometry towing at 2.6 knots with 150m warp to the doors in 26m of water.

Port door to the skid 18m. Skid to the starboard door 18m.
Headline height for both trawls 3m
Wingend heights for both trawls 1.5m
Wingend spreads for both trawls 8m
Centre of Headline to centre of Headline 14m
Port trawl (starboard wingend) to Starboard trawl (port wingend) 6m

The new centre skid performed well giving the desired results and keeping the supporting wires off the bottom and producing a small sand cloud between the gears.

Fish were scarce on the fine bottom grounds so an attempt to catch fish on the hard ground where good fish marks were observed on the echo sounder was attempted. This unfortunately was not successful, breaking the centre skid and badly damaging one of the trawls. Repairs were made and trawling recommenced on more muddy ground where both fish and Nephrops were obtained.

Catches from both trawls varied little with never more than one basket of fish difference between them. Analysis of the data will be made in the laboratory.

J MAIN

2nd November, 1987