#### P17/8

Not to be cited without prior reference to the Marine Laboratory, Aberdeen

Charter Fishing Vessel Heather Sprig BCK 181

Charter Cruise 2994H

# REPORT

13-17 March 1995

### Personnel

J H B Robertson HSO (In charge)

R J Kynoch SO P J Barkel PTO

H Ozbilgin PhD Student

N Lowry Visitor (DIFTA)

## Objective

To improve the design of the hooped small mesh cover used in selectivity experiments to allow larger diamond mesh cod-ends to be tested without masking by the cover.

## Out turn days per project: 5 days IBDZ

### Narrative

The vessel operated daily from Buckie, fishing on grounds in the Moray Firth, ICES Area IVa (but on 16 March from Fraserburgh). The trip ended at Buckie on 17 March 1995.

## Results

Eight hauls were completed. The RCTV was deployed on each haul with the miniature self contained colour camera being attached to the trawl on five hauls. Very good television observations were made of each design with good underwater visibility. A 3 m diameter internal hoop constructed with 67 mm diameter Alkathene was observed in two positions on the inside of the small mesh cover. The forward position (1 m forward of the cod-line) provided the greatest separation between the cod-end and cover. Separation at the front end of the cod-end was improved by a 1.8 m diameter external hoop. This improved cover design will be used on a forthcoming cod-end selectivity cruise. A cover with eight 8-inch diameter floats on top with 18 kg chain attached to the lower panel was also observed. There was good separation above the cod-end but the cover material touched the side of the cod-end and restricted its opening. Masking of the cod-end meshes may occur (flatfish were pinned at this point after escape from the cod-end) and this cover is not recommended although there may be scope for improvement to the design by installation of a half hoop on the lower panel to spread the cover material away from the cod-end. The data are being further analysed at the Laboratory.

J H B Robertson 28 March 1995