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# FRV "Goldseeker"

Cruise 8/88

8GR88

## Report

27 June to 16 July 1988

## Personnel

### Shore based

J Main	(In charge) 19 June-16 July
G Sangster	19 June-16 July
W Mojsiewicz	19 June-16 July
I Leaver	19 June- 8 July
W Gray	20 June-25 June
R Scott	20 June-25 June

### Onboard

P Barkel  
E Coroon

### Objective

To assess the survival of roundfish escaping from codends and subsequently held in underwater cages and to compare with that of control fish caught by handlines.

## Narrative

Prior to "Goldseeker" arriving at Gairloch, 9 underwater cages were prepared by the net riggers onshore. Using the launch "Shuna", the cages were transported to a position close to Longa Island where they were set up on the bottom in 18 meters of water.

30 handline caught control fish were introduced into each of 3 cages. An additional 10 tagged handline caught fish were introduced into each of the 9 cages to act as a check on all 9 cages in the experiment.

"Goldseeker" arrived on Tuesday 28 June when scallop dredges from the previous cruise were off loaded onto the pier at high water. The trawl was rigged and prepared onboard for operation the next day.

The vessel worked daily from Gairloch fishing on the Melvaig tow, having half landings on Monday 4 and 11 July. Only one full day was lost due to the toilet facilities onboard requiring repair.

Trawl hauls were made using both diamond and square mesh codends until all the cages contained the required number of fish, namely 40 fish per cage. On Friday 15 July the trawl gear was off loaded and replaced with the scallop dredges and beams before the vessel left for Kyle.

## Results

Fish were examined onboard to assess the damage sustained from escaping through the meshes. Using 90 mm double braided codends it appeared that less damage was sustained by the escaped haddock than previously found using 70 and 80 mm diamond and square mesh codends.

Survival of the fish held in the cages was improved compared to previous results. Jellyfish (Cyanea) continued to be a problem but did not appear to affect the survival of the fish.

Control fish were in excellent condition with only one fish dying in each of two cages of which one had been tagged. Both of these fish had been handline caught and after examination it appeared that both had been hooked through the roof of the mouth and had not healed. No other damage was immediately visible in these fish.

Results of survival after 15 days in the 9 cages:

		<u>Percentage Survival</u>
Control fish in cages	1	97
	2	97
	3	100
Escapes from diamond mesh	1	67
	2	79
	3	73
Escapes from square mesh	1	92
	2	92
	3	93

These fish will continue to be monitored until 15 August when the cages will be lifted and the fish released.

Haddock, codling, dabs and plaice were collected from the codend and held in tanks onboard the "Goldseeker" for use in experimental projects at the Firemore field station. It was reported that these fish survived well and were in excellent condition even though there had been large quantities of Cyanea in the codend.

J Main

3 August 1988

Seen in draft: