

R6
May

In Confidence: Not to be quoted without prior reference to the Laboratory

R1/10

FRV "Goldseeker"

14 & 15GR85 MB

Cruises 14 and 15/85

REPORT

16-31 October and 6-21 November 1985

Staff

Cruise 14/85

16-31 October

J Main	SSO (In charge)
G Sangster	HSO
W Mojsiewicz	SO
F Cruickshank	PTO IV
P Barkel	PTO IV

Cruise 15/85

6-21 November

J Main	SSO (In charge)
G Sangster	HSO

Objective

To investigate the behaviour of Nephrops to both standard rubber and rockhopper footropes.

Narrative

"Goldseeker" left Corpach on Wednesday 16 October and arrived at Mallaig on the evening of Thursday 17 October. The scientific gear and divers underwater vehicle were loaded and prepared during the evening.

Diving observations were conducted in areas where shallow water could be found off Eigg, Orinsay and Loch Nevis. Only one day was lost due to bad weather during the 10 days of operation at Mallaig. The scientific equipment was off loaded and returned to Aberdeen by lorry. The "Goldseeker" sailed on the evening of Sunday 27 October for Corpach on passage to Buckie.

At the start of cruise 15/85, the scientific staff embarked "Goldseeker" at Buckie on the morning of Wednesday 6 November but due to bad weather didn't sail. The vessel worked off Macduff for the next day and a half but bad weather forced "Goldseeker" to return to Macduff for shelter. Severe northerly gales held "Goldseeker" in port for the next 5 days with the fifth day, 13 November, being the half landing. Two more days 14 and 15 were worked on the fishing grounds before bad weather again made the vessel remain in port on 16 November. Work resumed on the 17th but again gales made the vessel return to port on the 18th without shooting the trawl. On the 19th and 20th work continued without interruption. The gear was off loaded on 21 November and returned to Aberdeen.

Results

Cruise 14/85

Direct observations in water shallow enough for diving operations (30m) were made difficult due to prawn creels set close to the shore on the edge of the mud and hard ground in all areas visited. Direct observations showed that the standard ground rig did not dig into the mud but pushed a small amount of mud ahead of the busom. With the rockhopper ground gear the busom did not push mud at all and only the edges of the large discs (250mm dia) dug into the bottom by no more than 3 to 6 cms.

As Nephrops were not seen in sufficient numbers on the grounds, a number of experiments were carried out by releasing previously trawled Nephrops in the track of the trawl. However, these immediately dived straight to the seabed and entered burrows and within one minute of landing on the mud all Nephrops were in burrows. Nephrops released in this way were not seen to react when the net approached the burrows.

Cruise 15/85

Fishing was conducted on Nephrops grounds 6 miles N of Macduff where both Nephrops and fish were obtained. Ground rigs were changed between standard and rockhoppers every 2 days and the composition and quantity of Nephrops and fish caught were compared.

Unfortunately, with the very bad weather during this part of the exercise, it was possible to obtain only 19 trawl hauls and no immediate conclusions could be made. The findings from the trawl hauls are now being analysed at this Laboratory. Still and video pictures were also obtained of these bottom rigs in action during the cruise.

J Main

9 December 1985