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Cruise Report

FRV "MARA"

June 6-24 1977

### Objective

To carry out a bottom trawling survey for sandeels in west coast waters with the main emphasis on the South Minch area. To investigate the limits of distribution of any concentrations found.

### Narrative

"Mara" left Buckie at 1330 on 6 June, but returned to harbour because of a bad weather forecast. She left Buckie again the following day and made for Stromness because of continuing poor weather. On 8 June the weather abated and "Mara" was able to proceed to the South Minch, completing three trawl stations en route. "Mara" finally docked in Oban at 1730 on 10 June.

"Mara" left Oban again early on 13 June and spent the following week working stations at Skerryvore, Dubh Artach and to the West of Islay. Trawling was conducted on a dawn to dusk basis, where possible, to make best use of a spell of good weather. Eighteen trawl stations were completed before "Mara" docked in Oban for the weekend on 17 June.

On 20 June "Mara" left Oban in the early hours of the morning and made for Stornoway, docking there that night. The next day the Butt of Lewis area was worked and three trawl stations were completed. On 22 June "Mara" crossed the Minch, spending some time working the area of Scourie Bank, and subsequently passed through the Pentland Firth and made for Smith Bank. Two trawl stations were carried out there, two more south of Clyth Ness, and "Mara" then made for Buckie docking there for the end of the cruise at 2200 on 23 June.

### Results

Many of the proposed trawl stations were investigated by echosounder and found to be unsuitable for trawling. Alternative stations were chosen nearby wherever possible.

Sandeels were obtained in significant quantities in nine out of 30 stations during the survey. All trawling was carried out using a "Mara" wing-trawl on the bottom.

A catch of 10 baskets was obtained some 25 miles south-west of Dubh Artach in a depth of 38 fathoms. The trawl was shot on a parallel tow, approximately half a mile to the east and once again a 10 basket haul of sandeels was taken. A haul a mile further east, however, yielded no sandeels. The first tow was delimited to the north and west by rough ground, and therefore these catches probably represent quite a localised concentration.

Two other stations in the area south-west of Dubh Artach gave catches of  $1\frac{1}{2}$  and 2 baskets of sandeels respectively, in depths of 30 and 27 fathoms.

In the North Minch, stations in the Butt of Lewis area gave no significant catches of sandeels. In the vicinity of Scourie Bank, however, a haul estimated at 100 baskets was taken. This was in an area of clean ground approximately two miles square and delimited by surrounding rough bottom. There was intense bird activity over this area and seabirds were observed eating adult sandeels. Heavy surface echosounder traces were also observed at this time. A previous haul three miles south of this area was fouled when a boulder was taken on the edge of hard ground. Despite the fact that the codend was not badly torn, no sandeels were taken on that haul.

On the way back to Buckie catches of 3 and 4 baskets were taken on Smith Bank in depths of 27 and 23 fathoms.

Most of the sandeels taken in the South Minch area were Ammodytes marinus but quantities of Gymnammodytes semisquamatus were also found. In the North Minch the catches were composed exclusively of A. marinus, as were those on Smith Bank.

The length range of A. marinus was 8.5-21 cm with a modal length of 12 cm, and that of G semisquamatus 14-25 cm with a modal length of 21 cm.

Main bycatch species were T esmarkii and common and long rough dabs, although in one haul a considerable bycatch of Nephrops norvegicus was taken. The larger hauls of sandeels contained a negligible bycatch.

J A Morrison  
18 July 1977

Seen in draft - W T Mair

'MARA' SANDEEL SURVEY JUNE 1977

