R1/10

11CR83

In Confidence: Not to be quoted without reference to the laboratory

FRV 'Goldseeker' Cruise 11/83

REPORT

14 November - 2 December 1983

## **Objectives**

- 1. To examine trawl caught cephalopods for gut content analysis and biometric parameters.
- 2. To obtain live Loligo and Eledone for laboratory studies, using Nephrops creels and squid jigs.

## Narrative

'Goldseeker' operated out of Buckie for the whole of the cruise. Trawling was carried out on two grounds, one north of Lossiemouth, the other north of Buckie, and 34 half-hour tows were made. The creel fleets were set at locations around Spey Bay. The cruise started and ended on the scheduled dates, two days were lost due to bad weather.

## Results

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Trawling: <u>Eledone</u> was present in most trawl hauls, a total of 105 were caught ranging in weight from 100-1600g. <u>Loligo</u> was taken in 21 hauls, the best catch being of 71 individuals; a total of 164 were taken with a dorsal mantle length range of 5-26cm.

All cephalopods were frozen and sent to Aberdeen University Zoology Department for further analysis.

Nephrops were present in most hauls, a total of 142kg were caught, 63kg (44%) were measured. The composition of the Nephrops catch sampled is shown in Table I.

Trawl hauls were carried out both in daylight and in darkness. The best catches of squids were taken in daylight, morning, hauls but as relatively few were taken in total this is not significant. Nephrops catches were greatest at the times of dawn and dusk.

Creeling: The creels were shot and hauled six times. Only one <u>Eledone</u> was caught, this was frozen.

General: Samples of Nephrops, Crangon, Portunus, Eupagurus and Buccinum were also sent to the University. Water samples for radio-caesium analysis were obtained off Buckie.

Table I Nephrops: Length frequency composition and mean carapace length of sampled catch.

	Lossiemouth										
Carapace length (mm)	10–14	15 <del>-</del> 9	20–4	25-9	30-4	35-9	40–4	45-9	50-4	Total	MCL
Males Females Berried female	1	7	84 78	377 322 2	500 186 2	300 105 2	106 16 1	10 2	1	1384 718 7	32.4 30.0
	Buckie										
Males Females Berried female		3 1	<b>7</b> 9 <b>5</b> 9	228 128	199 71 1	45 13 3	13 3			567 275 4	29.6 28.9

seen in draft: W B Reid - OIC 'Goldseeker'

F G Howard

<sup>9</sup> January 1983