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CRUISE REPORT

FRV "GOLDSEEKER"

27 July - 18 September (Parts I and II)

OBJECTIVES

1. To search for stocks of scallops and queens in the waters around Shetland.
2. To carry out a limited programme of trawling.
3. To take plankton samples and temperature recordings.

NARRATIVE

"Goldseeker" sailed from Buckie on 27 July and proceeded to Lerwick. Adverse weather conditions and a radar defect delayed the commencement of operation until 31 July, when dredging was started off the east coast of Shetland.

Weather conditions continued to be a handicap throughout the cruise, but despite the conditions and the time allotted a widespread survey was carried out.

Staff and crew changes were made on 22 August at Lerwick.

During the first part of the cruise the survey extended from the Sumburgh area, along the east coast of Shetland to Muckle Flugga, off north Unst. The second part took in Yell Sound, and the west coast from Hillswick to Burra Isle.

The scientific staff left on 16 September at Scalloway, "Goldseeker" sailing back to Buckie.

RESULTS

Dredging

All work was carried out using a standard 4' scallop dredge. A total of 523 Pecten maximus were caught in 230 15 minute hauls. Scallops were found to be widely distributed around the islands, but towing in some places was difficult owing to dense concentrations of weed.

Meat yields were determined with scallops caught in SE area, Unst and St Magnus Bay.

Age-length frequencies for different areas are given in the following table.

Area	% 3 year old and under	% 4-6 year	% 7-9 year	% over 9 year	Mean Length mm	Total Caught	Greatest Catch/15 min haul
SE and E Mainland & Bressay	<1	33	34	33	121.4	113	19
Skerries, Fetlar & Colgrave Sound	7	46	22	25	120.3	197	26
Unst	12	52	22	14	120.8	67	33
Yell Sound	-	18	30	52	131.7	66	10
St Magnus Bay & Muckle Roe	-	14	38	48	118.5	64	16
SW Mainland	-	13	31	56	126.9	16	3

The majority of scallops had gonad condition stages of III, IV and V. % values were: III: 23%; IV: 50% and V: 20%.

Chlamys opercularis were taken mainly as isolated specimens, the most caught was 12 in one haul in Busta Voe.

Trawling

Trawling was limited to four one-hour hauls, two on the east and two on the west coast. Catches of white fish were good in both cases; the numbers of individual fish species caught are given in the following table.

Species:	Plaice	L. sole	Witch	C. dab	L. RD	Cod	Haddock	Whiting	T. esmarkii	Argentine
Area:										
E. Coast D20a/c	-	127	39	-	29	27	343	17	985	286
W. Coast C18a	18	244	3	114	17		113	6	262	15

Species	Angler	Gurnard	Calliocyru	Sebastes	Skate
E. Coast	7	43	30	-	3
W. Coast	5	192	12	5	22

Plankton & Hydrography

Restricted sampling showed zooplankton to be most abundant off Fitful Head and south of Bressay. Cosmetira pilosella and Salpa fusiformis were common in both of these areas, and were also present in samples from north Whalsay and Yell Sound. Calanus, Spiratella retroversa and Berbe cucumis were important only off Fitful Head, and Pleurobrachia pileus and Thysanoessa inermis were found only in this area.

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