

R1/6

Not to be cited without prior reference to the Marine Laboratory, Aberdeen

FRV *Clupea*

Cruise 0298C

REPORT

28 January - 10 February 1998

Loading: 28 January, Fraserburgh**Unloading:** 11 February, Fraserburgh**Personnel**

| | |
|----------|----------------|
| S Davis | SO (in charge) |
| J Donald | ASO |

Fishing Gear: Scallop dredges**Objectives**

1. To carry out a survey of scallop stocks in Shetland waters.
2. To collect biological data on scallop growth rates and component tissue weights.
3. To sample by-catch species and make morphometric measurements on wheiks.

Out-turn costs per project: 14 days - FBA1**Narrative**

The scientific staff joined FRV *Clupea* at 0830 hours on 28 January, sailed from Fraserburgh at 1300 hours and arrived on station at 0400 hours on 29 January. Sampling began west of Scalloway at 1000 hours. The vessel continued to circumnavigate the Shetland Isles in a clockwise direction until 2000 hours on 7 February when FRV *Clupea* had to dock in Lerwick due to engine trouble. The vessel remained in Lerwick for the next 36 hours due to a combination of bad weather and engine trouble. FRV *Clupea* left Lerwick at 0800 hours on 9 February, docking in Fraserburgh at 0200 hours on 10 February. Scientific staff disembarked at 1000 hours on 10 February and all scientific equipment and samples returned to Aberdeen on 11 February.

Results

During the trip 90 dredge hauls were made and a total of 5,511 scallops were caught. The position of each haul is shown on the map in Figure 1. Catch rates varied from a minimum of 1/hr/m to a maximum of 114/hr/m. The aggregate catch rates for each area, expressed in numbers per hour per metre width at age, are shown in Figure 2. The individual graph headings in Figure 2 show the overall catch for each area. The length frequencies in numbers caught per half centimetre length category are shown in Figure 3. The numbers of each by-catch species caught is given in Table 1. Meat weight samples were taken from 10 different sites and is shown on Figure 1. Ring measurements for growth study were taken from 14 other sites and is also shown on Figure 1.

S Davis
4 June 1998

Seen in draft: A Simpson, OIC

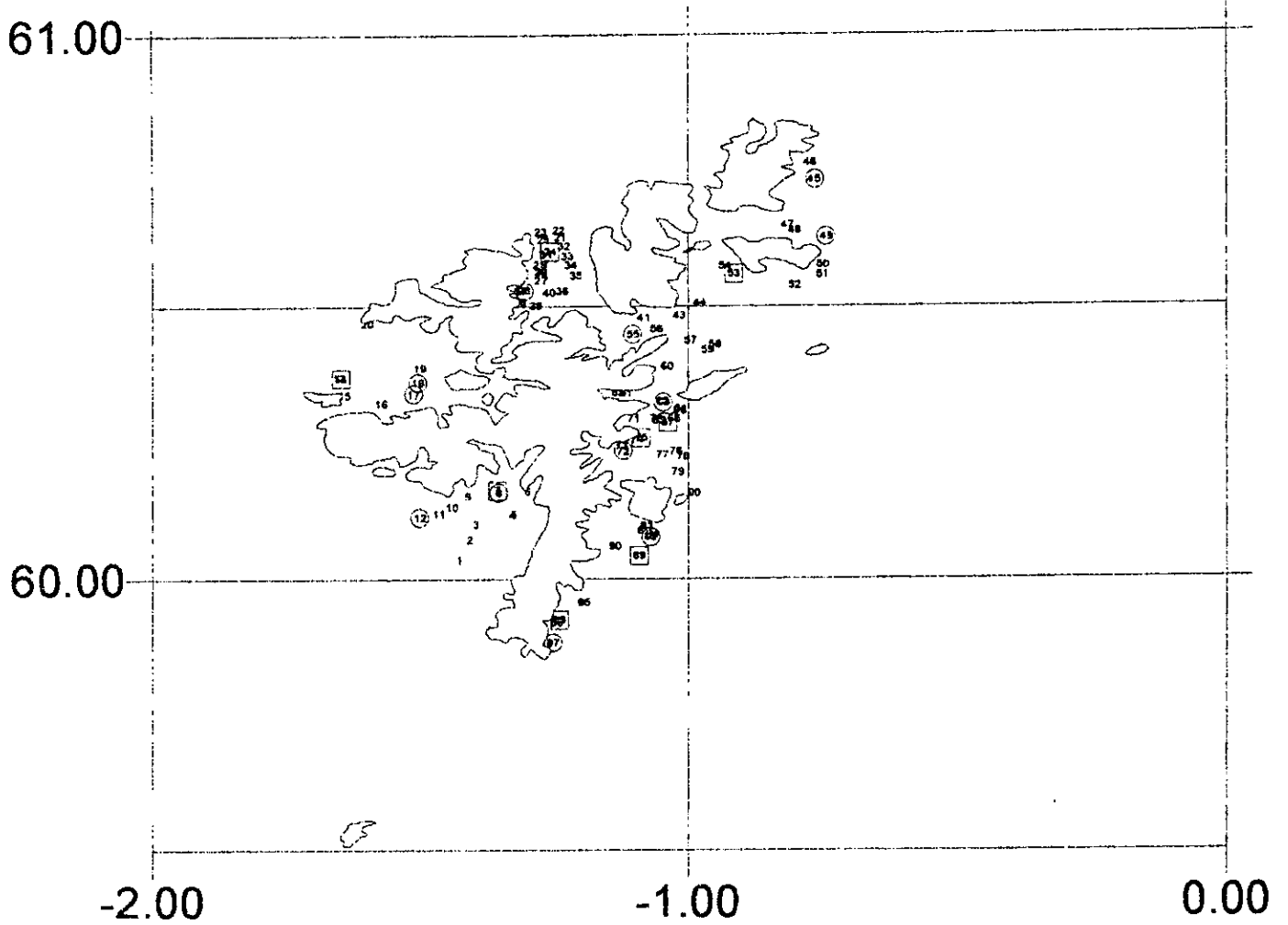
Table 1.

Total number of each by-catch species.

| Species | Numbers caught |
|----------------------------|----------------|
| Buccinum undatum | 210 |
| Cancer paguras M | 97 |
| Cancer paguras F | 109 |
| Chlamys opercularis | 249 |
| Glyptocephalus cynoglossus | 4 |
| Lepidorhombus whiffiagonis | 3 |
| Limanda limanda | 6 |
| Lithodes maja M | 2 |
| Lithodes maja F | 8 |
| Loligo forbesii | 1 |
| Lophius piscatorius | 120 |
| Melanogrammus aeglefinus | 1 |
| Microstomus kitt | 12 |
| Neptunea antiqua | 363 |
| Pleuronectes platessa | 19 |
| Raja batis M | 1 |
| Raja brachyura | 1 |
| Raja clavata F | 4 |
| Raja fullonica F | 1 |
| Raja naevus M | 5 |
| Raja naevus F | 27 |
| Scyliorhinus canicula M | 2 |
| Scyliorhinus canicula F | 1 |

Figure 1.

Shetland Scallop Survey 1998



Ring Measurements



Meat Weight Samples

Figure 2.

Shetland Scallop Survey 1998

Catch rate at age by area

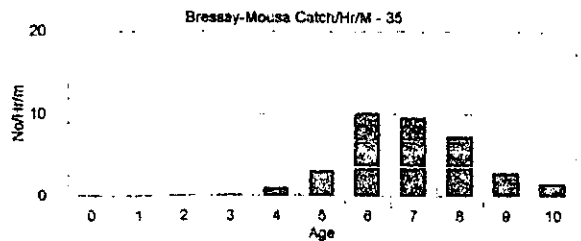
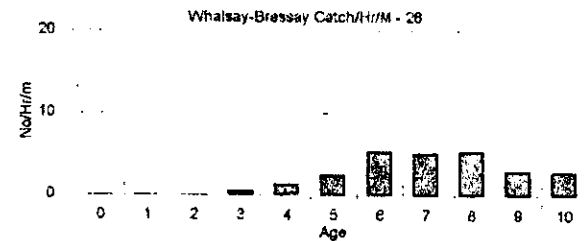
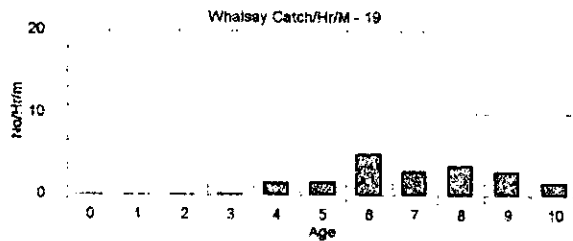
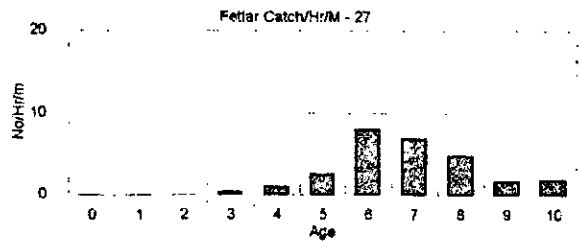
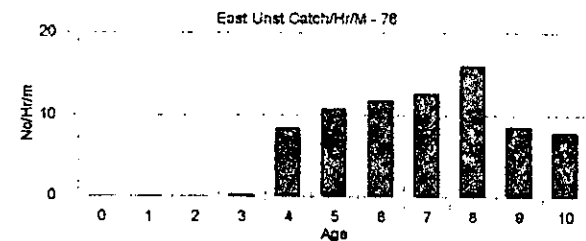
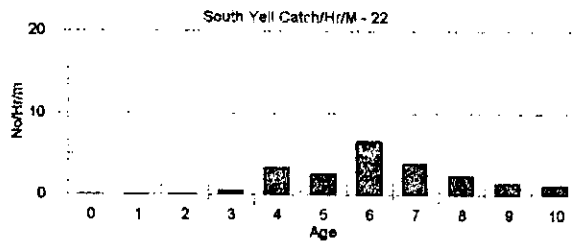
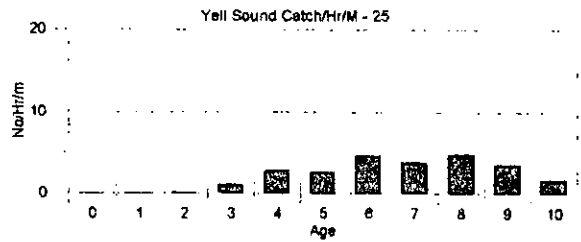
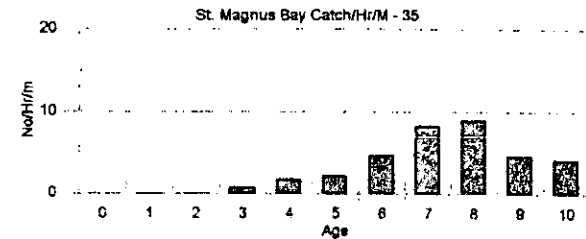
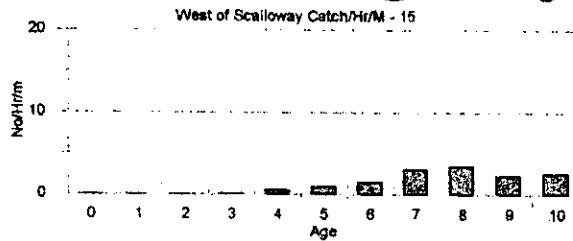
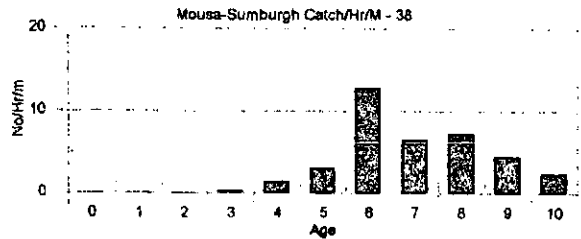


Figure 3

Shetland Scallop Survey 1998

Numbers at size by area

