

R1/6

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

FRV *Clupea*

Cruise 0301C

REPORT

14-27 February 2001

Loading: 12 February, Fraserburgh

Unloading: 28 February, Fraserburgh

Personnel

S Davis (In charge)
J Donald

Fishing Gear: Scallop dredges

Objectives

1. To carry out a survey of scallop stocks around Shetland.
2. To collect information on by-catches of other commercial fish and shellfish species.
3. To collect biological data on component tissue weights of scallops.
4. To collect samples for toxin analysis.

Out-time costs per project: 14 days MO1T

Narrative

The scientific staff joined FRV *Clupea* at 1000 hours on 14 February 2001 and sailed from Fraserburgh at 1300 hours. Sampling began at 0900 hours north of Sumburgh and continued until 1630 hours on 21 February when operations had to cease due to inclement weather conditions. The vessel remained at Collafirth pier the next day and fishing resumed in Yell Sound at 0730 hours on 23 February. The survey continued and was completed off Scalloway at 1300 hours on 25 February. The vessel sailed to Orkney for the night and proposed to sample east Orkney but a bad weather forecast forced the vessel back to Fraserburgh. Scientific staff, equipment and samples left the vessel at 1800 hours on 26 February and returned to Aberdeen.

Results

During the trip 86 dredge hauls were made and a total of 5,601 scallops were caught. The position of each haul is shown on the map in Figure 1. Catch rates varied from a minimum of 0/hr to a maximum of 906/hr. The aggregate catch rates for each area, expressed in numbers per hour per metre width age, are shown in Figure 2. The individual graph headings in Figure 2 show the overall catch rate 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. Biological samples for toxin analysis were taken from six different areas.

S Davis
14 March 2001

Seen in draft: A Simpson, OIC

Table 1

Total number of each by-catch species

Species	Numbers
<i>Buccinum undatum</i>	67
<i>Cancer pagurus</i> M	106
<i>Cancer pagurus</i> F	105
<i>Glyptocephalus cynoglossus</i>	1
<i>Lepidorhombus whiffagonis</i>	1
<i>Limanda limanda</i>	5
<i>Lithodes maja</i> M	2
<i>Lithodes maja</i> F	2
<i>Lophius piscatorius</i>	164
<i>Microstomus kitt</i>	5
<i>Neptunea antiqua</i>	331
<i>Pleuronectes platessa</i>	11
<i>Raja batis</i> F	1
<i>Raja brachyura</i> M	3
<i>Raja clavata</i> M	1
<i>Raja clavata</i> F	2
<i>Raja naevus</i> M	48
<i>Raja naevus</i> F	36
<i>Scyliorhinus canicula</i> M	2
<i>Scyliorhinus canicula</i> F	5
<i>Zeugopterus punctatus</i>	1

Figure 1.

Shetland Scallop Survey 2001

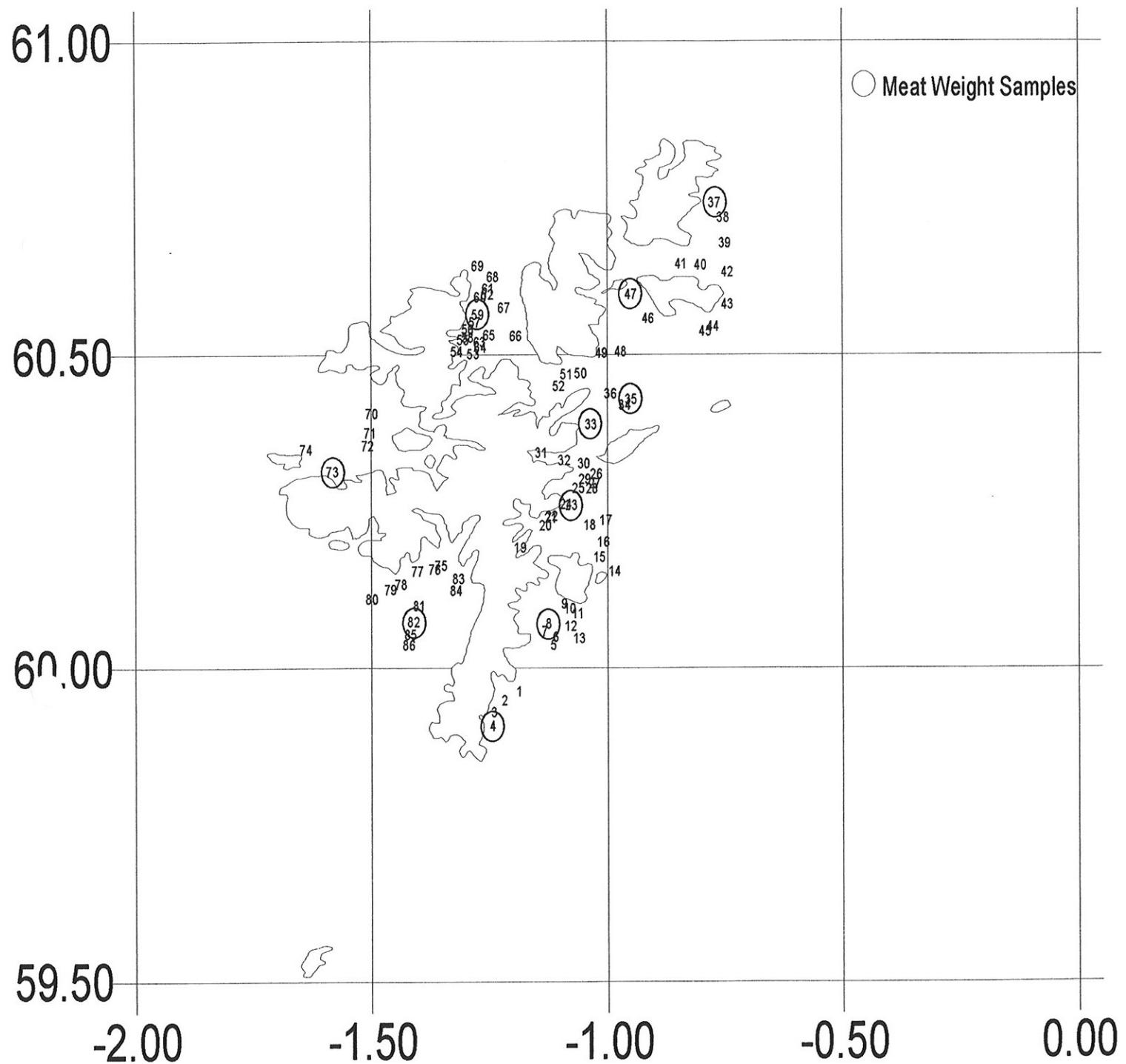


Figure 2.

Shetland Scallop Survey 2001

Catch Rate by Age in area

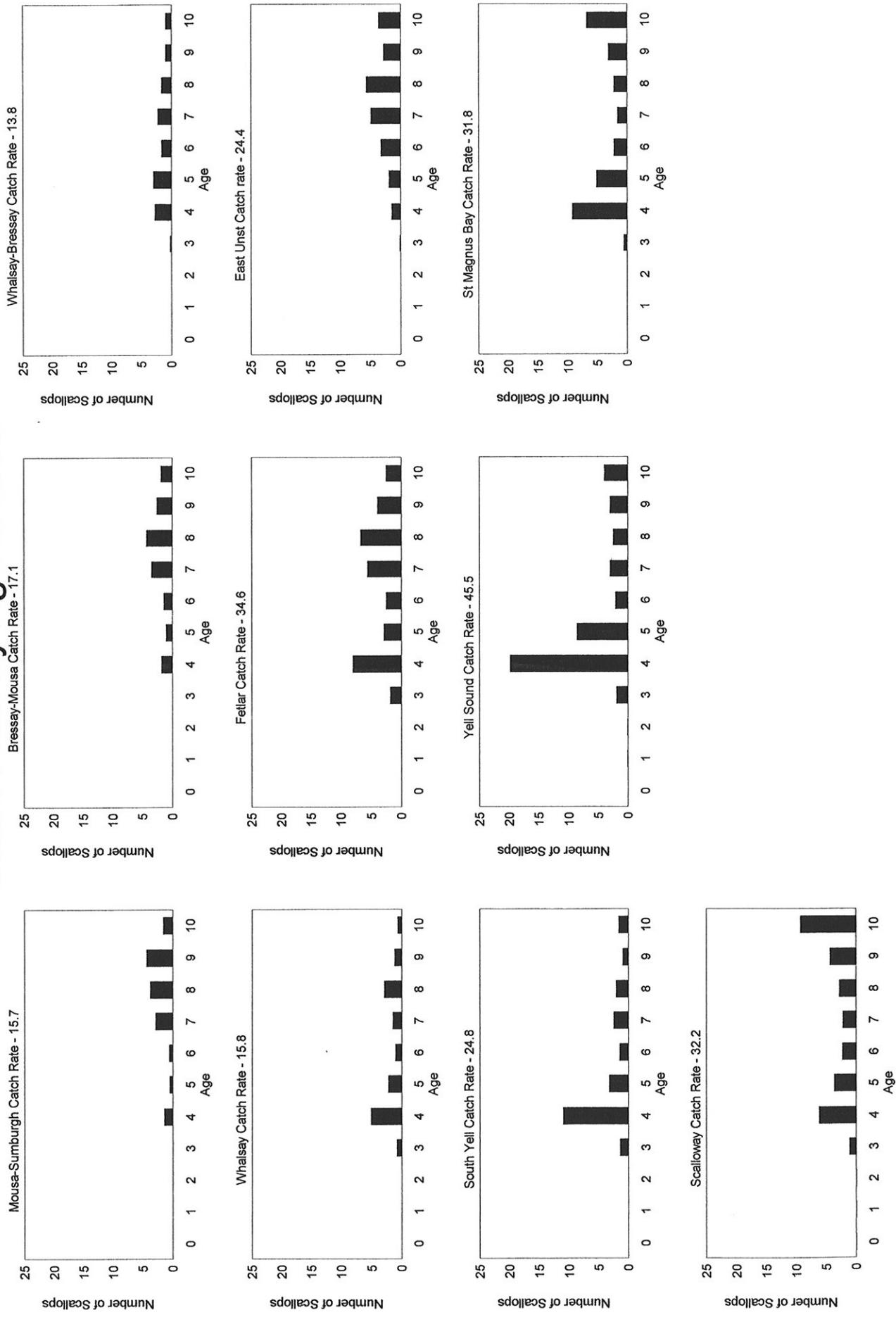


Figure 3.

Shetland Scallop Survey 2001

Number at Size in area

