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FRV *Clupea*

Cruise 0299C

REPORT

21 January - 9 February 1999

Loading: 18 January, Fraserburgh
Unloading: 9 February, Fraserburgh
Half landing: 30 January, Fraserburgh

Personnel

T Howell	B2 (In charge)	21-30 January
S Davis	B1 (In charge 1-9 February)	21 January - 9 February
J Donald	A4	31 January - 9 February

Fishing Gear: Scallop Dredges

Objectives

1. To carry out a survey of scallop stocks in the North Sea.
2. To collect information on by-catches of other commercial fish and shellfish species.
3. To collect biological data on scallop growth rates and component tissue weights.

Out-time costs per project: 19 days MO1T

Narrative

The scientific staff joined FRV *Clupea* at 0900 hours on 21 January and sailed from Fraserburgh at 1200 hours. Sampling began at 1325 hours at position 57°48.00'N 01°47.00'W and continued in the Moray Firth until 28 January when the scallop survey was abandoned to allow collection of PSP/DSP samples from North East of Orkney. The survey resumed on 29 January and continued in the western Moray Firth until making passage to Fraserburgh for the half landing. *Clupea* entered Fraserburgh in late afternoon on 30 January and remained until 1 February. A change of scientific staff took place on 31 January. Passage to Aberdeen Bank commenced at 0700 hours on 1 February and surveying continued south until 3 February. Operations ceased on 4 February due to bad weather conditions when the vessel put into Montrose. *Clupea* sailed from Montrose at 0800 hours on 5 February and made for Fifeness where surveying recommenced and some additional tows were included. Fishing continued until 2000 hours on 6 February when *Clupea* set sail for Fraserburgh due to a bad weather forecast (arriving there at 0000 hours on 7 February). Further work was precluded by bad weather and the vessel unloaded on 8 February.

Results

During the trip 109 dredge hauls were made and a total of 4,938 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 852/hr. The aggregate catch rates for each statistical rectangle, expressed in numbers per hour per metre dredge width by age, are shown in Figure 2. The individual graph headings in Figure 2 show the overall catch rate for each statistical rectangle. 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 10 other sites and is also shown on Figure 1.

T Howell
19 February 1999

Seen in draft: A Simpson, OIC

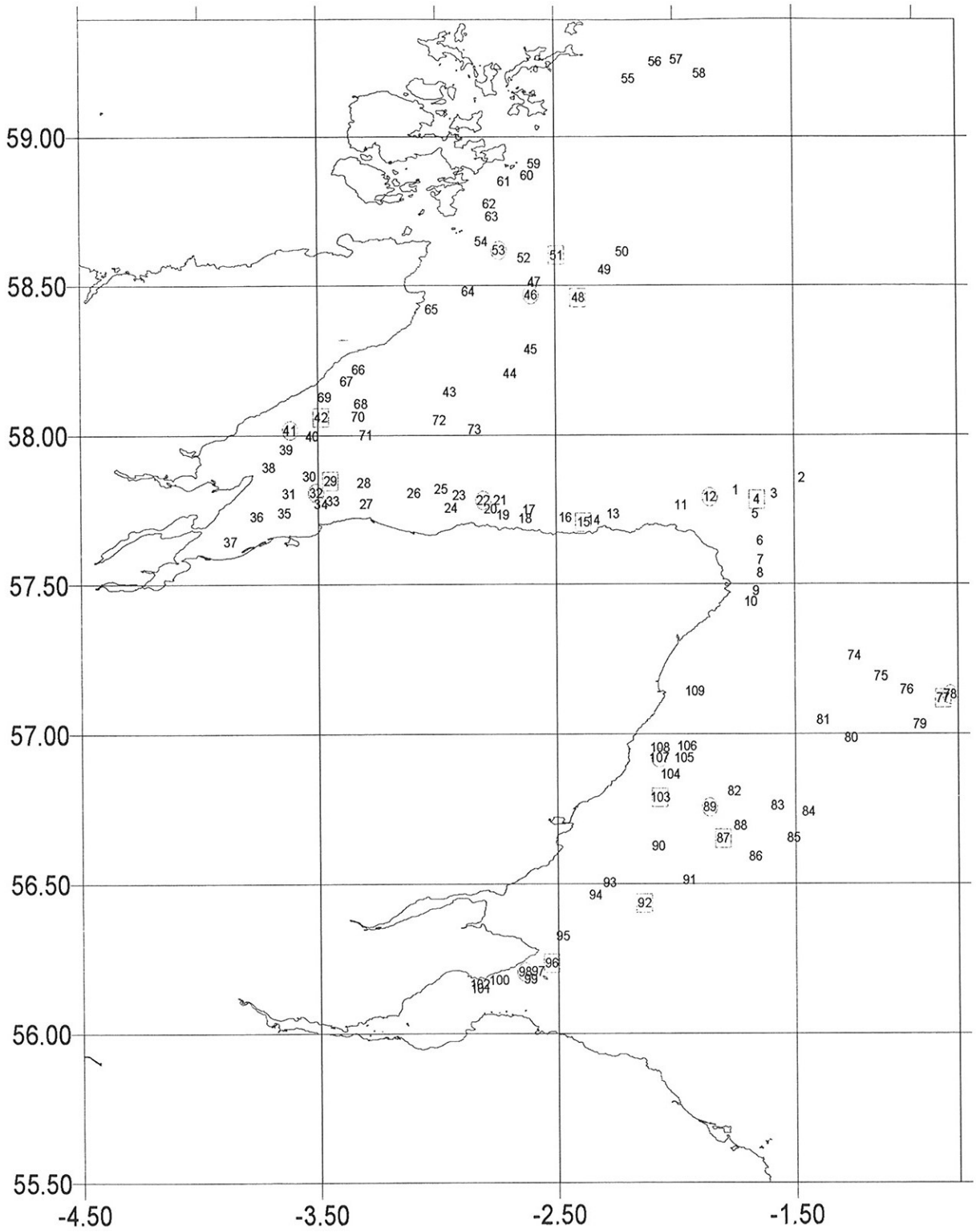
TABLE 1

Total number of each by-catch species

Species	Numbers
Buccinum undatum	75
Cancer paguras M	85
Cancer paguras F	112
Chlamys opercularis	51
Cyclopterus limpus	1
Glyptocephalus cynoglossus	
Lamanda lamanda	61
Lithodes maja M	10
Lithodes maja F	10
Lophius piscatorius	15
Microstomus kitt	17
Melanogrammus aeglefinus	1
Necora puber F	2
Neptunea antigua	262
Pleuronectes platessa	54
Raja clavata M	10
Raja clavata F	27
Raja montagui M	1
Raja montagui F	6
Raja naevus M	21
Raja naevus F	54
Raja radiata F	1
Trisopterus esmarki	1
Zeugopterus punclatus	1

Figure 1.

East Coast Scallop Survey 1999



Meat Weight Sample

Ring Measurements

Figure 2.

East Coast Scallop Survey 1999

Catch rate by age in stat squares

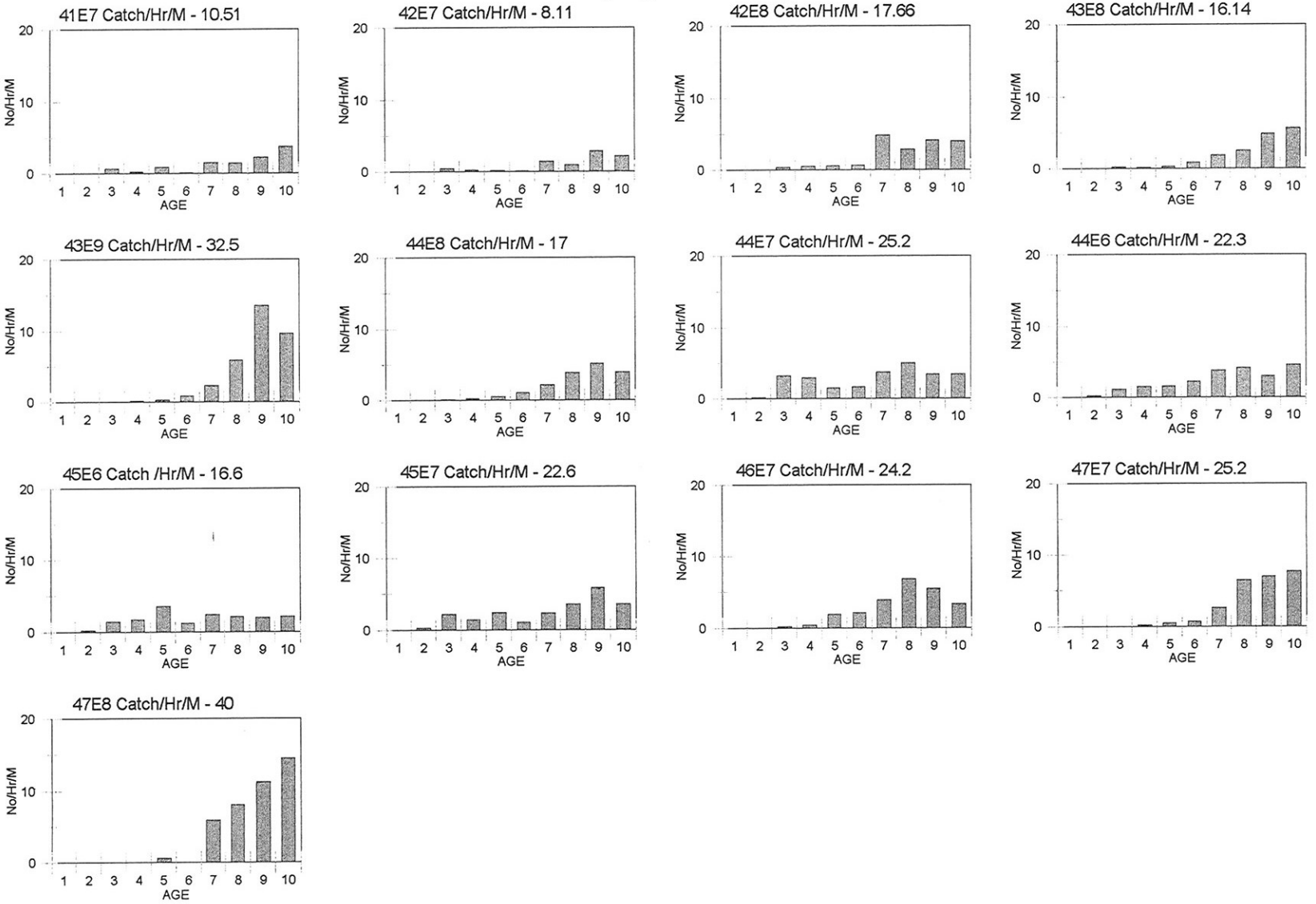


Figure 3.

East Coast Scallop Survey 1999

Numbers at size in stat squares