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Charter Fishing Vessel *Ocean Bounty* (PD182)

Cruise 2007H

REPORT

17-26 September 2007

Personnel

Iain Gibb (SIC)

Objectives

1. To identify important cod nursery areas in the North Sea as part of SISP project.
2. To biologically sample all 0-group cod for length, sex and maturity. Otoliths will be extracted at sea and preserved dry in plastic vials for later ICP-MS analysis.
3. To collect live 1-group cod from St Andrews Bay/Bell Rock.

Out-turn days per project: MFP6Q04 – 10 days

Narrative

All gear and scientific equipment was loaded onto the vessel in Peterhead on the morning of Monday 17 September. After the installation of gear was complete, the vessel departed at 1600 and made passage to St Andrews Bay/Bell Rock to trawl for live 1-group cod the next morning. Despite a total of 5 trawls deployed in this area there were no catches of live 1-group cod. The vessel remained in this area until a sample size of 100 juvenile cod was achieved.

After this, the vessel carried out a survey of juvenile cod nursery areas, in areas of known high juvenile density and in consultation with the vessel's skipper. A total of 23 further trawls were made in Buchan, Moray Firth, Orkney and Shetland (Figure 1). Trawl duration ranged from 15-80 minutes, averaging 40 minutes. Zero catch rates of juvenile cod were seen in the Moray Firth and Orkney tows, however, sample sizes of at least 100 juvenile cod were successfully achieved in the Buchan, Tay and Shetland areas (Table 1). Average bottom water temperature, as derived from a minilog attached to the trawl headline was 13.0 in the Tay, 12.5 in Buchan, 12.4 in the Moray Firth, 12.0 off Orkney and 11.2 in Shetland. All cod were biologically sampled for length and otoliths removed and preserved dry in plastic microtubes for future ICP-MS analysis. All gear was unloaded in Peterhead on 26 September.

Thanks to the skipper and crew of the *Ocean Bounty* for their co-operation with this survey.
Figure 1: 2007H trawl locations showing juvenile abundance. Catch rates varied from 0 – 636 cod per hour.

Iain Gibb
20 December 2007

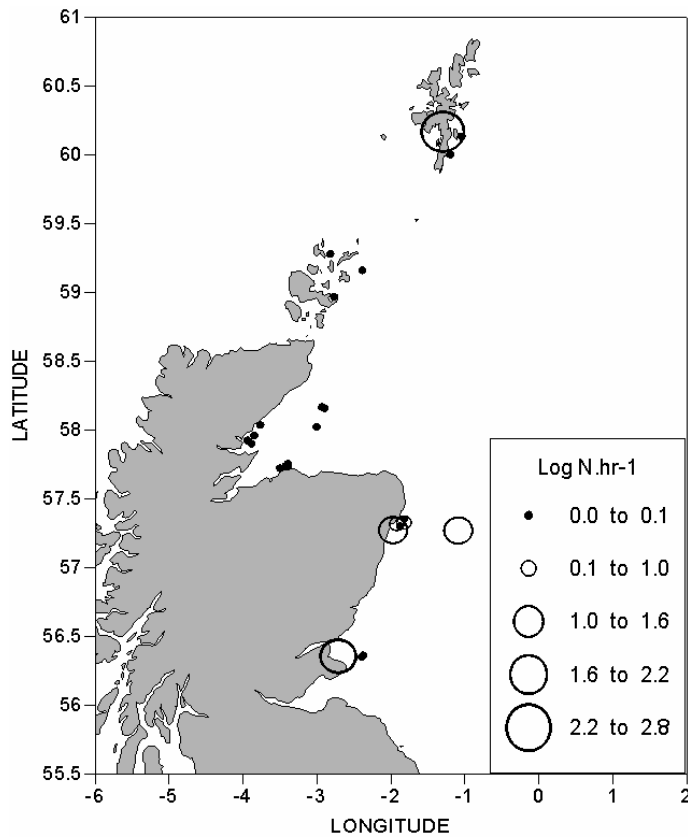


Table 1: Summary information of 0-

group cod samples

Area	Bay	No 0-group cod	Length Range
Tay	Bell Rock	0	
	St Andrew's Bay	142	8.9-16.9
Buchan	Newburgh Bay	100	9.4-17.3
Moray Firth	Brora Point	0	
	Covesea Skerry	0	
	Dunrobin Bay	0	
	Smith Bank	0	
Orkney	East Orkney	0	
	Papa Westray Bay	0	
	Stronsay Firth	0	
Shetland	Horewick	0	
	Mousa Sound	0	
	WitNESS Voe	159	9.9-17.5
GRAND TOTAL		401	