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Charter Vessel Cruise

MV "Ocean Bounty"

REPORT

3-11 October 1988

Personnel

J Kinnear - HSO
 C Shand - SO
 C Todd - Gatty Marine Laboratory (one day only)
 M Bentley

Objectives

1. To repeat the photographic study of Torness artificial reef using established transects.
2. To assess fish and shellfish populations on the reef using creels, trammel nets and gill nets.

Narrative

Scientists joined the vessel in Aberdeen on 3 October. Camera and video equipment were set up and tested. The vessel sailed for Torness at 0430 hrs the following morning. Engine problems 4 miles north east of Bell Rock caused a two hour delay. "Ocean Bounty" arrived at Torness Reef at 1730 hrs. Three sets of gill and trammel nets were shot on the reef before the vessel made her way to Torness harbour. Very poor weather conditions for the remainder of the trip made photography and fishing very difficult. All the photographic transects were successfully completed, but the use of fishing gear was severely curtailed as hand-hauling the nets proved to be extremely dangerous in the prevailing conditions. Dr Chris Todd and Dr Mark Bentley joined the vessel for one day to observe the fishing trials, but poor weather forced the vessel back to port after hauling only two nets.

The vessel docked at Berwick-on-Tweed on 11 October 1988.

Results

Analysis of the photographic transects and fish caught during the cruise is being carried out by students at the Gatty Marine Laboratory in St Andrews as part of their involvement in the reef project; and as yet a full report is not available. However initial results from the photographic studies show a definite increase in the numbers of macro-crustacea especially Galathea sp. Large numbers of Asterias rubens, Echinus esculentia and ophiuroids were also present.

Although the use of nets was severely limited, it was apparent that more fish, especially cod, were being caught on the reef than off. Interestingly, only trammel nets proved effective, no fish were taken in gill nets. The reason for this is unclear. Edible crab were notably smaller on the reef than off.

Species captured in Trammel nets

	On Reef		Off Reef	
	<u>Number</u>	<u>Size Range (cms)</u>	<u>Number</u>	<u>Size Range (cms)</u>
Cod	8	33-56	2	34, 47
Ling	1	53		
Lemon sole	1	31		
Dogfish	3	64-76	1	68
Common dab	1	30		
Edible crab	22	7.6-11.0	10	11.0-15.5

J Kinnear

10 January 1989