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RV *Aora*

Cruise 1209H

REPORT

1 - 10 July 2009

Ports

Loading: 1 July, Keppel Pier, Millport

Unloading: 10 July, Keppel Pier, Millport

Scientific Personnel

P Boulcott (SIC)
C W Shand
C Leakey (SNH)
C Hall

Gear: Pyramid frame and underwater video camera kit.

Costs to Project: 10 days MF02Q

Objectives

- Establish baseline data on the scallop populations in the Lamlash Bay area

In September 2008 part of Lamlash Bay, Arran, became a community marine reserve and is now a no take zone (NTZ), the purpose of which is to help protect and enhance biodiversity. In addition to the enhanced biodiversity there is also an expectation that the no take zone will result in the scallop stocks being enhanced. The survey will collect baseline data on the scallop populations in and around the NTZ and will collect further information relating to other epibenthic species. SNH also propose to site a fixed UW camera within the NTZ and it is hoped that this survey will help to identify a suitable site.

Narrative

Scientists joined RV *Aora* at 1200 (all times GMT) on Wednesday 1 July at the University Biological Marine Station, Millport. After setting up camera equipment on the vessel, RV *Aora* weighed anchor at midday the following day and made for Arran. An initial trial of the survey equipment was carried out on site at Lamlash Bay on the evening of Thursday 2 July. RV *Aora* then returned to Millport on the morning of 3 July where C Hall disembarked, as scheduled. Passage was again made for Arran the next day where the survey was resumed. The remaining days of the cruise were spent surveying each of the three designated sites in and around Lamlash Bay (see Figure 1) using a digital stills camera in conjunction with the pyramid drop frame. RV *Aora* made two unscheduled returns to Millport during this period, on the evening of 5 July and again on the evening of 8 July, in order to make alterations to the umbilical cable. Return passage was made for Millport at 1600 on Thursday 9 July where vessel was unloaded the next day.

Results

Survey coverage:

The camera survey programme proposed was successfully completed for the 3 designated sites in and around Lamlash Bay. A map of the 310 stations surveyed during the trip is shown in Figure 1. The survey followed a two-stage Cochran design, where four quadrat photographs are taken at each station. In total, 1240 2 m² quadrat digital stills photographs were taken of the seabed during the survey.

Submitted:
P Boulcott
24 July 2009.

Approved:
I Gibb
24 July 2009.

Figure 1: Map of the Lamlash Bay NTZ and the 3 sites visited by 1209H – surveyed stations are denoted by red dots.

