

Cruise Report R.R.S. John Murray 4/80, 3rd - 17th June 1980

Introduction

The objectives of the cruise were to obtain samples of the rock from a number of shoals in the Malin/Hebridean Seas using a team of diving geologists. The main thrust of the investigation was to be directed towards the Blackstones Bank Igneous centre, the age of which is in dispute (Cretaceous or early Tertiary) and the Stanton Banks which had not previously been dived upon.

Narrative

The R.R.S. John Murray left Barry on the morning of the 3rd of June and made passage to Ardrossan where further members of the scientific party and some diving equipment were embarked. The vessel then continued passage to the Blackstones Bank ($56^{\circ}5'N$, $7^{\circ}10'W$) which was reached on the morning of the 5th. A rock shoal peak was then buoyed and four sets of dives investigated and sampled this dive site. During the night of the 5/6th an echo-sounder survey was run over part of the Bank. During the morning the John Murray was joined by the Aberystwyth Geology Department research vessel Kay BB and diving took place on a further part of the Bank. Preparations for the next sample site were terminated when a main engine failure necessitated a return to Ardrossan for repairs. Regrettably the John Murray left the Blackstones in ideal diving conditions and made passage to Ardrossan which was reached on the morning of the 7th. The vessel sailed from Ardrossan on the evening of the 9th having completed engine repairs and arrived back at the Blackstones on the morning of the 10th. Dive sites were delimited and buoyed by the R.V. Kay BB and six sets of dives completed on two sites in excellent conditions. Following an exchange of scientific personnel the R.V. Kay BB left the area. An echo sounding survey of part of the Bank was carried out during the night. On the 10th of June six sets of dives were completed on two sites and a further four dives on two sites on the morning of 11th June. Deteriorating sea conditions and a bad weather forecast forced abandonment of the diving programme on the afternoon of the 11th and the vessel made passage in poor weather to Castle Bay, Barra. Improving weather conditions and an encouraging forecast led to the vessel leaving Castle Bay at midnight of the 12/13th and making passage to the Stanton Banks ($50^{\circ}10'N$, $7^{\circ}50'W$). During the 13th of June five sets of dives were completed on four sites on the Stanton Banks. An echo sounding survey of part of the Stanton Banks was conducted during the night of the 13th/14th and a further two sets of dives on two sites completed on the morning of the 16th in deteriorating sea conditions. In view of the prevailing and forecast weather the vessel made passage to the south east where two sets of dives were carried out on a shoal to the west of Islay ($55^{\circ}49'N$, $6^{\circ}46'W$). A sheltered anchorage was found for the night of the 14/15th of June in Loch Indaal. Further dive sites to the west of Islay which were to be investigated on the 15th June had to be aborted due to adverse weather conditions and the vessel made passage to Loch Ryan where some of the scientific party were disembarked. The vessel returned to Barry on the morning of the 17th of June.

Results

The samples obtained from Blackstones Bank are being incorporated into a detailed study of the igneous centre by Dr. G. P. Durant whilst those from the Stanton Banks and the shoal west of Islay are being used to give geological control to maps being prepared for publication in the I.G.S. 1:250,000 U.T.M. series.

30'

7° W
TIRRE

06 30' W

STANTON

BANKS

BLACKSTONES
BANK



MULL

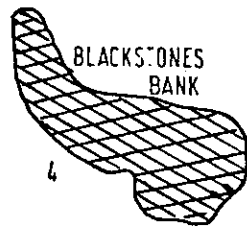
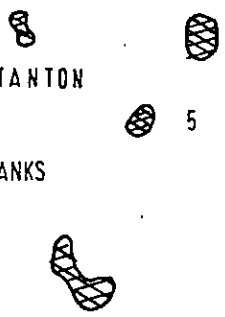
COLUSAISAY

56° N

56 N

RRS JOHN MURRAY CRUISE 4/80
3 - 16 June 1980
Aberystwyth - Whittington

Sites of Proposed Diving:  5
Sites dived upon 



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