

R1/6

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FRV *Alba na Mara*

Cruise 1208A

REPORT

1 - 17 November 2008

Ports

Loading: Fraserburgh

Unloading: Fraserburgh

Personnel

A McIntosh 04 – 17 November

M McKenzie 04 – 17 November

G Packer 04 – 17 November

M Gubbins 14 – 17 November

Fishing gear: BT 158; 2m beam trawl

Objectives

1. To undertake fish and sediment sampling in the Clyde and Minch areas in support of the temporal trend and biomarker monitoring studies.
2. To sample fish and sediment from the Clyde and Solway Firth CSEMP stations.
3. To undertake sampling of flounder collected from upper Clyde on behalf of SEPA West.
4. To undertake sampling of flounder in St Andrews Bay, the Firth of Forth and from the upper Forth (Alloa) in support of the ICON (Integrated Chemical and Biological Effects) Programme and biomarker monitoring studies.
5. Collect wet fish for the aquarium.

Out-turn Days per Project: 14 days 10124 (AE11p)

Narrative

Scientific gear was loaded and secured on 29 October. Due to an electrical fault which was not repaired until 3 November, sailing was delayed until 4 November. With a weather window to allow passage to the west coast, *Alba na Mara* sailed north and west arriving in the Clyde area and sampling the CSEMP outer Clyde site before anchoring overnight in Lamlash Bay on 6 November. The fishing sites at Garroch Head and Hunterston were sampled on 7 November and the vessel tied up overnight at Fairlie pier. On 8 November the fishing sites at Skelmorlie and Holy Loch were completed before sailing south and tying up overnight in Ardrossan. Deteriorating weather precluded working on 9 November and with worsening weather forecast,

it was decided to move the vessel to Campbeltown. Severe weather precluded further sailing until 0700 on 12 November when passage was made for the Firth of Forth. *Alba na Mara* tied up alongside Rosyth at 1700 on 14 November. Matt Gubbins joined the vessel and the fish caught from Alloa were transferred and processed aboard *Alba na Mara*. Fishing for flounder and sediment sampling at Tancred was successfully carried out during 15 November and at St Andrews Bay on 16 November. On completion of this work, *Alba na Mara* made passage for Fraserburgh where docking was completed by 0300 on Monday 17 November. Sampling gear, scientific equipment and all samples were unloaded on Tuesday 18 November and returned to Aberdeen.

Results

The samples collected are summarised in Table 1.

Objective 1 was partially completed. Sampling at Broad Bay (North Minch) and Colonsay will be included in the 0109S cruise programme.

Objective 2 was not completed due to delayed sailing and weather but provision will be made completion of this objective during the 0109S cruise.

Objective 3 was not met due to the SEPA RV *Sir John Murray* not working during this period. Provision has been made to obtain these samples during first week in December.

Objective 4 was completed successfully.

Wet fish was collected for the aquarium.

The objectives that were possible, given the reduction in cruise time and the generally adverse weather, were successfully completed thanks to the excellent co-operation of the officers and crew of *Alba na Mara* and the participating scientific staff.

A McIntosh SIC
17 November 2008

Seen in draft
A Simpson OIC *Alba na Mara*

Table 1

Samples taken Sampling areas	EROD	Bile (PAH metabolites)	Plasma (Vtg) ⁽¹⁾	Liver for PAH; CB; PBDE; metals	Flesh for PAH; CB; PBDE; metals	Sediments ⁽²⁾ for PAH; CB; PBDE; metals	CSEMP fish ⁽³⁾	CSEMP Sediments and Water ⁽⁴⁾
Outer Firth of Clyde	-	-	-	-	-	-	-	5
Garroch Head	20	20	10	4 pools 5 fish	4 pools 5 fish	3	-	-
Hunterston	20	20	10	4 pools 5 fish	4 pools 5 fish	3	-	-
Skelmorlie	20	20	10	4 pools 5 fish	4 pools 5 fish	3	-	-
Holy Loch	20	20	10	4 pools 5 fish	4 pools 5 fish	3	-	-
St Andrews Bay	Flounder sampled for FRS and the ICON programme ⁽⁵⁾					3	-	-
Firth of Forth Alloa	Flounder sampled the ICON programme ⁽⁵⁾					-	-	-
Firth of Forth Blackness	Flounder sampled for CSEMP, FRS and the ICON programme ⁽⁵⁾					Sediments for ICON	25	3

- 1 Male fish only
- 2 Sediments sampled from start, mid and end of trawl track
- 3 CSEMP biological effects and chemistry requirements
- 4 Sediments - (1mm sieved) for epibenthos; organic, inorganic and physical chemistry
Water - CTD 5m from surface and 5m from bottom; nutrient chemistry
- 5 ICON fish samples for multi discipline analyses

1208A cruise track

