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RV *Sir John Murray* (SEPA)

## **PROGRAMME**

14-17 November 2011

### **Ports**

**Loading:** Troon

**Unloading:** Troon

**In setting the survey programme and specific objectives, etc the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in Marine Scotland's Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the survey with staff on-board before work is commenced.**

In the interest of efficient data management it is now mandatory to return the survey report, to I Gibb and the Survey Summary Report (old ROSCOP form) to M Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

### **Personnel**

Marie Russell (SIC)

**Fishing gear:** Bottom trawl; beam trawl, both with 50 mm cod-ends (provided by SEPA)

**Scientific gear:** Day grab, table and 1000 µm sieve (provided by SEPA); 2 fish holding tanks (MSS); formalin solution (MSS).

### **Objectives**

1. To undertake fishing for plaice and dab in the Solway Firth in support of the CSEMP and integrated assessment of contaminants monitoring studies.
2. To sample sediments for CSEMP requirements in the Solway Firth and Outer Clyde

**Estimated Days per Project:** 2 days ST002; 2 days ST03r

### **Procedure**

Staff will join the *Sir John Murray* in Troon on 14 November.

During the course of this survey, fish (plaice and dab) and five random fixed sediment sites for chemistry and benthic macroinvertebrates (CSEMP) will be sampled from the Solway Firth and five random fixed sediment sites for chemistry and benthic macroinvertebrates (CSEMP) will be sampled from the Outer Clyde.

Further fish and/or sediment sampling may be undertaken, if required (e.g. due to having not

been sampled during the concurrent *Alba na Mara* cruise, 1611A).

Upon collection, the fish will be maintained alive aboard the *Sir John Murray* for subsequent sacrifice and tissue sampling aboard the *Alba na Mara*. Collected live fish will be road transported from Troon to a suitable east coast port for transfer to *Alba na Mara*.

Frozen sediment samples, preserved benthos samples, and MSS fish tanks to be offloaded as the staff disembark at Troon.

### **General Arrangements**

Formalin will be carried abroad for the preservation and storage of biological material.

Normal contacts will be maintained with the Laboratory.

Close contacts will be maintained between the *Sir John Murray*, the *Alba na Mara* and the road transport in order to co-ordinate the transfer of fish from one vessel to the other.

Submitted:  
*C Robinson*  
20 October 2011

Approved:  
*I Gibb*  
4 November 2011

**Table 1:** Sampling Locations

		decLat	decLong	Lat	Long	SEDIMENT Chemistry & Benthos PSA core		COMMON DAB Effects Chemistry		PLAICE Effects Chemistry	
<b>Outer Clyde</b>	SW Ailsa Craig	55.1663	-5.2228	55 9.98N	005 13.37W	Y	Y				
<b>Outer Clyde</b>	SE of Ailsa Craig	55.2241	-5.0580	55 13.45N	005 3.48W	Y	Y				
<b>Outer Clyde</b>	E of Johnston's Point	55.3230	-5.3683	55 19.38N	005 22.10W	Y	Y				
<b>Outer Clyde</b>	N of Ailsa Craig	55.3333	-5.0833	55 20.00N	005 5.00W	Y	Y				
<b>Outer Clyde</b>	NE of Ailsa Craig	55.3405	-5.0386	55 20.43N	005 2.32W	Y	Y				
<b>Solway</b>	Southernness Point	54.6700	-4.0000	54 40.20N	004 00.00W			60-65*	Y	30-35*	Y
<b>Solway</b>	Solway Firth 25	54.7500	-4.0000	54 45.00N	004 00.00W	Y	Y				
<b>Solway</b>	Solway Firth 7	54.7800	-3.8000	54 46.80N	003 48.00W	Y	Y				
<b>Solway</b>	Solway Firth 1	54.8000	-3.8300	54 48.00N	003 49.80W	Y	Y				
<b>Solway</b>	Solway Firth 4	54.8000	-3.8100	54 48.00N	003 48.60W	Y	Y				
<b>Solway</b>	Solway Firth 3	54.8100	-3.8200	54 48.60N	003 49.20W	Y	Y				

\*Because of expected mortalities during transport to *Alba na Mara*, more fish are to be collected than will be tissue sampled

**Solway Fish Site**

	start lat	start long	end lat	end long	depth
Alba 2010	54 40.39N	004 01.836W	54 40.327N	004 08.498W	41.8 metres
Scotia 2009	54 40.25N	003 58.21W	54 38.32N	003 57.70W	40 metres