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Charter Vessel FRV *Cirolana*

Charter Cruise 2402H

REPORT

15-18 July 2002

Personnel

David Bruno	(SIC)
Alistair McIntosh	
Mike Snow	
Wendy MacDonald	
Anna Turnbull	
Gill Packer	
Stuart Wallace	
Katy Adamson	
Mary O'Dea	Visitor

Fishing Gear

Granton with tickler chain and small mesh cod-end.

Objectives

To perform a check monitoring fish disease survey off the Firth of Forth, a reference area (east of Orkney) and in areas in the vicinity of the Moray Firth. To obtain grab samples at each station and analyse for PAH. Collect tissues from common dab for mixed function oxidase activity and PAH bile metabolites. To collect tissues from different marine fish species to determine prevalence of IPNV. Distribution and prevalence will be determined and the genetic relatedness of isolates will form future work.

Procedure

FRV *Cirolana* will work in the Forth, Moray Firth and east Orkney areas obtaining fish samples by trawling. The cruise will start and terminate in Aberdeen.

Out-turn Days per Project: 1.33 days AE11a; 1.33 days AE08o; 1.33 days FC1190.

Narrative/Results

FRV *Cirolana* sailed from Aberdeen on 15 July at 1015 hours and commenced trawling in the vicinity of the Beatrice oil platform during that afternoon and south east of Fair Isle on the morning of 16 July. Sampling was completed in the Bell Rock and St Abbs Head areas on 17 July. Additional stations were included south of Bell Rock, Wee Bankie and on Marr Bank before docking in Aberdeen late pm 18 July.

A total of 13 trawls were successfully completed and over 10,100 common dab, *Limanda limanda* examined for disease by standardised ICES methods and a full data set for the intermediate fish length groups achieved of the long term monitoring positions. The

livers from fish >25 cm were examined for tumour development. All cod caught were examined for pseudobranch lesions. Haddock equal to or greater than 26 cm were sampled when present in individual hauls and all examined for vertebral deformities. Histological and frozen samples were taken of X-cell lesions.

Within each area, 20 common dab (10 male, 10 female) were sampled for mixed function oxidase function activity, PAH bile metabolites and PAH concentration in liver and flesh. A sediment sample was taken from the middle of the trawl tract from which fish were sampled. The sediment will be analysed for PAH. In addition, sediment was sampled for oestrogenic chemical residues at Bell Rock and St Abbs Head.

Fish were sampled to determine the prevalence of infectious pancreatic necrosis virus (IPNV) from a range of species. Fish kidney was pooled from 10 fish, one sample placed in RNA later for molecular analysis and a duplicate sample placed in liquid nitrogen. Between three-nine species were sampled per region and in total 2,800 samples collected for laboratory analysis.

All the main objectives of the sampling programme were successfully achieved thanks to the excellent co-operation of the officers and crew of the FRV *Cirolona*.

D W Bruno
Chief Scientist
26 July 2002