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FRV Scotia

Cruise 1409S

## **REPORT**

23 October – 3 November 2009

### **Ports**

**Loading:** Aberdeen

**Unloading:** Aberdeen

### **Personnel**

R Kynoch (SIC)  
F Burns  
K Coull  
P Copland  
J Drewery  
E Armstrong  
C Davis  
I Penny  
M Montgomerie SEAFISH (visitor)

**Project:** MF01ta (12 days)

### **Fishing Gear**

Top drum: GOV trawl (BT137) rigged with ground gear D (Rockhoppers)

Lower drum: GOV trawl (BT137) rigged with ground gear C

### **Objectives**

1. Comparative fishing trials using GOV trawls (BT137), one rigged with ground gear C and the other with the new rockhopper ground gear D.
2. All catches will be worked up as per standing instructions.

### **General**

Due to the large swell running into Aberdeen harbour sailing was delayed until 1300 on 23 October. The vessel steamed North overnight to fishing tows in the Scalloway deeps on the west side of the Shetland Islands. During the passage both nets were shot off the netdrums to tighten them up. The vessel arrived at Scalloway deeps on the morning 24 October and commenced paired fishing tows with ground gears C and D. Due to the prevailing weather conditions fishing had to be suspended on 25 October. The vessel

steamed round to the NE side of Unst and re-commenced work on fishing tows at Balta and NW Flugga from 27 to 28 October. Due to the low numbers of cod being encountered the vessel returned to the west side of the Scalloway Deep to fish new tows in an attempt to improve cod catches. However, numbers of cod were still very limited and with an increasing weather forecast giving SE gales the decision was taken to steam down to the west side of the Orkney Islands. Fishing continued on fishing tows at the North Shoal during 30 October but cod were encountered in very small numbers. Again due to an increasing weather forecast giving SW gales the vessel steamed overnight to Start Point on the East side of the Orkney's and continued fishing during 31 October. Again very few cod were encountered during these tows and therefore the vessel steamed overnight to the Moray Firth and continued work at Smith Bank throughout 1 November. Due to a NW Gale it was not possible to work during 2 November therefore the decision was taken to finish fishing operations and make for Aberdeen. The vessel arrived at Aberdeen Harbour on the morning of 3 November and docked at approximately 0100 hours.

## **Results**

During the cruise 21 paired fishing tows were completed. Haddock were encountered during most hauls with whiting, plaice and mixed rays/skate in many, but cod numbers were very low. Other species caught during the trials included ling, common dab, long rough dab, monkfish and megrim however, only cod, haddock, whiting, plaice and mixed rays/skate will be considered for subsequent analysis.

The laboratories self contained mini-tv system was deployed during 5 hauls with footage obtained of both ground gear rigs. Observations during 3 hauls of the port lower wing tip netting section of ground gear C rig showed the netting was twisting around the rubber leg section as soon as the gear touched down onto the seabed. The starboard lower wing tip was observed during only 1 haul and found to be very low and close to the rubber leg section, but did not appear to twist as found on the port side. No lower wing tip twists were noted for ground gear D rig probably due to the fishingline and ground gear length being, but as found with C both lower wings tips were very low and close to the hopper disc's. It appeared for both ground gears that the mid-bridle was taking up much of the strain when towing and therefore pulling the lower wing netting panels down closer to the seabed. Some observations were made of the centre bobbin section of ground gear C which indicated that the leading edge of the fishingline was extremely close to and almost touching the seabed. Observations of ground gear D showed the centre rockhopper disc section having good all round ground contact. It was further noted that the fishingline was orientated so that it was close to the top of each hopper disc which kept it and the belly sheet netting clear of the seabed. Most gear damage during the cruise occurred to the trawl rigged with ground gear C with the majority being lower wing tip repairs and replacement, but no similar damage was noted on the trawl rigged with ground gear D.