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MFV "Starcrest" PD 232

Purse-seine Charter Cruise Report

30 June - 30 July 1986

Personnel

J A Morrison	SSO
D Beveridge	ASO
D Baird	ASO

Objectives

1. To carry out a programme of herring tagging in the northern North Sea using purse seine caught herring and tagging with "Floy" T tags.
2. To carry out a tagging mortality experiment using magnetic microtags with herring held in the ships RSW tanks.
3. To transport live herring to Loch Ewe for use in sonar experiments at the Loch Duich site.

Narrative

Scientific personnel loaded the charter vessel on the morning of 30 June and "Starcrest" immediately made for Shetland waters, searching the vicinity of Bosies Bank and the grounds 10-20 miles east of Fair Isle on the way. "Starcrest" arrived at the Foula grounds to the west of Shetland at 1230 on 1 July and after searching for some time located a suitable herring mark. The purse-seine was shot and sufficient herring were caught to allow 900 herring to be tagged. Thereafter, "Starcrest" continued to work in the same general area until mid-day on 2 July, by which time, a total of nearly 3500 herring had been tagged. The purse-seine was again shot on the afternoon of 2 July, and 4000-5000 herring were brailled into the ship's RSW tanks in order to transport them to Loch Ewe. "Starcrest" arrived at Loch Ewe at 1300 on 3 July and brailled approximately 1000-2000 fish into a keep cage anchored in Loch Thurnaig. Subsequently, "Starcrest" steamed back to the west of Shetland, searching to the west and to the north of the Orkneys en route.

The herring shoals had disappeared from the vicinity of Foula by the time "Starcrest" returned to these grounds. Accordingly, searching was continued south to Sumburgh, and eastwards to the Forty Mile ground where Dutch trawlers were operating. Despite good marks in this area in which the net was shot three times, "Starcrest" was unable to catch the herring, which were moving very fast. Consequently, when the weather started to deteriorate on the morning of 6 July, "Starcrest" made for Mousa and began searching the east coast of Shetland.

Herring marks were located in the Fetlar/Skerries area later the same day, and after three blank hauls a catch was taken from which approximately 1500 herring were tagged. "Starcrest" operated in the Balta area from 7-9 July, and from three hauls a further 2600 herring were tagged. Late on 9 July "Starcrest" sailed for Peterhead for the mid-trip break, arriving there at 1230 on 10 July.

"Starcrest" left Peterhead again at 0930 on 15 July and made for the east side of Shetland, searching inshore from Bard Head to Muckle Flugga. No suitable herring marks were encountered and "Starcrest" continued round to the west side of Shetland. Here the net was shot 12 miles north of Ramna Stacks. A small catch of herring was taken and approximately 500 herring were tagged. Storm-force north-westerly winds forced "Starcrest" to make for the shelter of Balta Sound, which was reached at 1145 on 17 July, and the weather caused the cessation of activities until the following morning.

Searching was resumed south-east of Fetlar on 18 July. Although the net was shot once in this area nothing was caught, and "Starcrest" continued searching to a position 12 miles south-east of Bard Head. Here, a successful haul was made and approximately 900 herring were tagged on 19 July. The following day was spent working in the same area but with little success, with only approximately 300 fish being tagged.

On 21-22 July "Starcrest" again operated in the Fetlar/Skerries area, and carried out a further four hauls. One of these hauls was highly successful, and over 4000 herring were tagged.

On 23 July "Starcrest" had to make for Lerwick for sonar repairs which were completed by early evening, and "Starcrest" returned to the Bard Head grounds. Here a successful shot was made and a further 1300 herring were tagged. "Starcrest" searched the same grounds again on the night of 24 July but without success and the next morning J Morrison and D Baird were put ashore in Lerwick to travel home.

The last period of the charter was intended to allow another live-fish run to Loch Ewe, and accordingly after putting the two scientists ashore at Lerwick, "Starcrest" continued searching to the south-east of Shetland. A successful haul was made near the Forty Mile ground and herring were brailed into the RSW tanks, before the vessel set out for Loch Ewe. Adverse weather on the way severely hindered progress, and to try and keep the fish in good condition "Starcrest" lay at anchor at Kyle of Tongue on the night of 26 July. The vessel sailed to Loch Ewe the next day and approximately 600 fish were transferred to the keep cage in Loch Thurnaig.

"Starcrest" set off north again the same evening, remained at Ullapool overnight, and reached the Pentland Firth by 2000 28 July. One unsuccessful haul was carried out at the Halibut Bank on the way home, and "Starcrest" finally docked in Aberdeen at the end of the charter at 0600 on 30 July.

Results

A total of 26 hauls were made with the purse seine during this charter and over 14600 herring were tagged. Herring tagged ranged from 24-32 cms in length, with the bulk of these lying within the range 26-30 cms and being fish having 2-5 winter rings.

A tagging mortality experiment was carried out using magnetic microwire tags between 22 July and 28 July. In this experiment 100 herring were tagged with magnetic microwire tags and put into one of the ship's RSW tanks with a running water supply. At the end of this time period four fish had died, and the rest were in good condition confirming a low initial tagging mortality for this method.

Of the two live transport operations only the second was successful, but, from this, enough live herring were obtained to enable all the target strength experiments proposed for Loch Duich to go ahead.

J A Morrison

24 February 1987

MV 'STARCREST' TAGGING CHARTER CRUISE 30/6 - 30/7 1986

TAGGING POSITIONS

