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MFVs "Rose" and "Aspire"

Ring Net Charter Cruise Report

12-30 January 1987

Personnel

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Objective

To tag "haflin" (2-ring) herring in the inner Moray Firth with "Floy" T tags.

Narrative

Scientific personnel joined the charter vessels at 1000 on 12 January and immediately thereafter the vessels proceeded to sea and began an echo-search of the Inverness Firth. Good herring marks were observed outside Munlochy Bay and to the east side of the entrance of the Caledonian Canal. The ring net was shot five times that day, and two good catches of herring were taken, but the bulk of the herring caught were 1-ring with modal lengths of 13-14 cm, and thus too small to tag. Thereafter, throughout the first week of the charter, despite considerable searching and a total of 19 hauls in the Beaulay, Inverness and Cromarty Firths, no significant concentrations of 2-ring herring were discovered. Despite this, however, a small component of 2-ring herring was always present mixed through the smaller fish, but to isolate these for tagging meant an enormous amount of sorting. For this reason, by the end of the first week, only some 600 herring had been tagged.

To try and overcome this problem, an escape panel was inserted into the bag of the net in order to retain fewer small fish, and thus to reduce the amount of time required for sorting prior to tagging. The original mesh size of the bag was 33 mm, and three large panels of 35, 38 and 41 mm mesh size respectively, were inserted into the bag before fishing operations were resumed, after the weekend break, on 19 January.

During the second week of operation a further 16 hauls were completed, all in the Inverness Firth. Although the size range of the herring in the shoals appeared to be rather similar to those caught in the initial week and despite the fact that several large hauls of over 10 tonnes were taken, by the time the bag of the net had been stretched between the two boats for about ten minutes only a few baskets of herring would be retained. In this way it was possible to tag many more herring in the target length range of 17-24 cm. Nearly 7000 herring were tagged during the second week of the charter.

During the last week of the charter good shoals of herring were again found in the Munlochy/Avoch area and fishing was concentrated in that area. The escape panel in the net again proved effective and during the week over 6500 herring were tagged. In addition, during the week, approximately 2000 live herring (including many 1-ring fish, some as small as 13 cm) were returned to the Laboratory. This was to enable experiments to be carried out to find a suitable type of tag for these very small fish.

At the end of the charter the gear was unloaded at Avoch and the scientific staff returned to Aberdeen on the afternoon of 30 January.

#### General comments

Whilst good concentrations of 1-ring herring were found over quite wide areas within the Inverness and Cromarty Firths, large sprats of size range 10-14.5 cm were also present. These were heavily meshed in the wings of the net on a number of occasions, but were rarely present to any great extent in the samples subsequently taken from the bag of the net. As a consequence it is not possible to use the relative proportions of the two species in samples from this charter to look at potential by-catch problems in this area.

Much of the success of this charter is due to the skippers and crews of the charter vessels whose help and hard work in altering the net at the end of the first week of the charter, brought about a dramatic increase in the tagging rate.

In all 14499 herring were tagged during this charter, mainly within the length range 17-24 cm and with over 75% of this total lying within the range 17-20 cm. A full list of tag releases is attached.

J A Morrison

24 February 1987

TAG RELEASES INVERNESS FIRTH JANUARY 1987 - MV Rose/Aspire

13 01 87	Munlochy Bay	CC34001 - CC34176
14 01 87	Munlochy Bay	CC34177 - CC34657
19 01 87	Broadsea	CC34658 - CC34668
20 01 87	Munlochy	CC34669 - CC34776
20 01 87	Avoch	CC34777 - CC35050
20 01 87	Fortrose	CC35051 - CC35777
21 01 87	Avoch	CC35778 - CC36600
22 01 87	Munlochy	CC36601 - CC38000
22 01 87	Munlochy	CC21701 - CC22800
23 01 87	Munlochy	CC22801 - CC25350
26 01 87	Avoch	CC25351 - CC25394
26 01 87	Munlochy	CC25395 - CC25999
26 01 87	Munlochy	CC38001 - CC38600
27 01 87	Munlochy	CC38601 - CC41183
28 01 87	Munlochy	CC41184 - CC41350
28 01 87	Avoch	CC41351 - CC42071
29 01 87	Munlochy	CC42072 - CC42986
29 01 87	Kilmuir	CC42987 - CC43300
29 01 87	Munlochy	CC43301 - CC44200

- NB
- 1 All tags used Floy T tags
  - 2 Nos CC34001 - CC39000 small tag with ½" monofilament and 1" body
  - 3 All other tags ¾" monofilament and 1" body

MFVs 'Rose'/'Aspire'

Tagging Charter 12 - 30 January 1987

