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International Council for the Exploration of the Sea

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Anadromous and Catadromous
Fish Committee

The occurance of feeding salmon off the north West Coast of

<u>Ireland</u>

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A fairly substantial drift net fishery has been carried on off the coasts of Counties Mayo and Donegal in the north west of Ireland for a long period. The combined catch of salmon in this area in 1973 was 280 metric tonnes. Up to the early sixties only small open boats (28ft to 32ft) operated in this fishery but with the expansion of the fleet the size of the boats increased, thus enabling the crews to go further out to sea and use longer trains of nets.

The drift net fishery is for summer fish mainly only 1+ sea winter fish. A few previous spawners and fish that have spent two years feeding in the sea are taken occasionally.

In 1973 it was reported by fish processers that a proportion of grilse taken in the offshore nets were feeding fish. A sample of 4 stomachs were examined in 1973 and food consisted of <u>Sprattus</u> sprattus, <u>Hyperoplus lanceolatus</u> and <u>Pollachius pollachius</u> Went (1973).

In June 1974 similar reports of salmon being caught with food in their stomachs were received from fishermen and fish processers. The fish were in "poor" condition being soft and not very acceptable in the trade.

Visits were paid on a regular basis to fish processors in Dublin who received fish from the north and west of Ireland. From 20 June to 1 July a total of 293 salmon stomachs were collected from fish taken in offshore nets and 33% were found to contain food.

A further collection was made between 4 July and 15 July. A total of 555 stomachs were examined from fish taken in seine nets in the estuaries of the rivers close to the drift net areas and 282 were taken from drift net caught fish. Only two drift net fish were found with food in their stomachs in the second sampling and the stomachs of fish taken in the estuaries of the rivers were found to be empty.

The only food organisms were fish, the dominant species being Sprattus sprattus which were present in 56 (64%) of the stomachs. These were identified either as a whole fish or from vertebral counts. Ammodytes tobianus was identified from 4 stomachs and one fish contained Clupea harengus. The remainder of the stomachs contained unidentifiable fish remains, incomplete vertebral columns, otoliths or pieces of cartilage, none of which were identified.

The presence of feeding salmon in Irish coastal waters is of rare occurrence. Fishermen and fish processers who have handled salmon in this area for upwards of twenty years thought it worth their while to report the occurence of feeding salmon in 1974. It is of interest to note that the feeding fish occurred only in the early part of the season, mid June to 1 July. Thereafter they were very scarce.

It is possible that the fishing fleet which fishes a maximum of 40 km from the shore was intercepting fish in their way to more distant waters. Recaptures of tagged adult salmon have shown a wide area of origin. One recapture was made in Sweden 1,750 km from the tagging Station. There were recaptures in the east and west coast of Scotland and in rivers in Wales, and also along the south coast of Ireland. Tagged smolts from Great Britain and a number of European countries have been taken in this area also.

References

Went A E J (1973). Recaptures in Ireland of foreign tagged salmon 1972/73 ICES C.M. 1973/M15.

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