



Serial No. 3579  
(D.a. 74)

ICNAF Summ.Doc. 75/24

ANNUAL MEETING - JUNE 1975

UK Research Report, 1974

by

B.W. Jones  
Fisheries Laboratory  
Lowestoft, England

SUB-AREAS 1-5

A STATUS OF THE FISHERIES

UK fishing effort in 1974 at 15,300 hours was almost the same as in 1973. Freezers again accounted for most of the total.

Total landings of cod were 4,200 tons, two-thirds coming from sub-area 3 and a quarter from sub-area 1.

HOURS FISHING, NUMBER OF ARRIVALS AND LANDINGS OF COD FROM THE NORTH-WEST ATLANTIC (a)

	ICNAF Sub-areas					Total
	1	2	3	4	5	
	LANDINGS (STATUTE TONS, GUTTED, HEAD ON)					
1973	404	512	3616	-	-	4532
1974	1025	342	2698	77	30	4172
	HOURS FISHED					
1973	601	1544	13280	-	-	15425
1974	2006	2518	9976	351	472	15323
	NUMBER OF ARRIVALS					
1973	9	14	22	-	-	45
1974	20	17	34	5	5	81

(a) Provisional figures

B SPECIAL RESEARCH STUDIES

I Environmental Studies - No work undertaken in the ICNAF area.

## II Biological Studies:

### SALMON

Scientists from the MAFF and DAFS Freshwater Fisheries Laboratories participated in a meeting of the ICES/ICNAF Joint Working Party on North Atlantic Salmon at Copenhagen in March 1974, where detailed plans were drawn up for the preparation of a detailed scientific report on the international salmon tagging experiment at West Greenland in 1972. This report will be published in a special volume of the ICES Rapports et Proces Verbaux. Work was continued at the laboratories on the analysis of length, age and other biological material, including blood samples for racial analysis, collecting during the tagging experiment.

Smolt tagging experiments were again conducted in a number of rivers in the Spring of 1974.

### CONTINUOUS PLANKTON RECORDER SURVEY IN THE ICNAF AREA IN 1974

The survey with Continuous Plankton Recorders operated from the Oceanographic Laboratory of the Institute for Marine Environmental Research, Edinburgh, was continued in 1974 on the same basis as in other years. The survey was financed by the UK Natural Environment Research Council.

Recorders are towed at a depth of 10 metres, at monthly intervals, along standard routes by merchant ships from Denmark, Iceland and the United Kingdom. During 1974 recorders sampled for 915 miles in sub-area 1, 1316 miles in sub-area 2, 4706 miles in sub-area 3, 533 miles in sub-area 4 and 585 miles in sub-area 5. This sampling forms part of the laboratory's standard survey of the North Atlantic and the North Sea. Sampling in the western Atlantic was reduced in 1974 owing to the abandonment of Ocean Weather Stations BRAVO and DELTA and changes in shipping schedules.

The data processing of the results from the survey is fully automated. The survey area is divided into statistical rectangles, each  $2^{\circ}$  of longitude by  $1^{\circ}$  of latitude, which are then grouped into a system of standard areas (see Annual Report of the Scottish Marine Biological Association for 1970-71) and also the ICNAF sub-areas. The monthly distributions of all species, or groups of species, are plotted as mean numbers per statistical rectangle, standard area and ICNAF sub-area. At the end of every year the annual and seasonal fluctuations in abundance of each entity are calculated for each standard area in the North Sea and north-eastern Atlantic for the period 1948 onwards and for each standard area and ICNAF sub-

area in the Western Atlantic from 1962 onwards; routine statistical analyses, such as Principal Component Analysis, are then carried out. Further details may be obtained on application to the Director, Institute for Marine Environmental Research, Oceanographic Laboratory, 78 Craighall Road, Edinburgh EH6 4RQ.

A report of the plankton for 1974 is being submitted to the Annual meeting of ICNAF in June 1975.

#### COD ISOZYMES

Work has continued on the examination and analysis of material collected from the ICNAF area in earlier years. Capacity for resolving cod genotypes has been improved and as a result the differences between the various racial elements are clarified.

