

Near Northern Seas Committee

1965

By E. BERTELSEN

Belgium

(E. Leloup)

Work on Fish

Biological studies on dab and whiting were started during 1965.

Denmark

(E. Ursin)

Work at Sea

The "Dana" was available for 10 weeks in the spring and 5 in the autumn. Work was mainly carried out in the Skagerrak and the northern North Sea. Whiting and herring were special subjects, but steps were also taken to chart the distribution of fish species in the Skagerrak. The boat "Havkatten" continued quantitative sampling of young flatfish on the Kattegat coasts. In the absence of the "Biologen" various investigations were made from chartered cutters.

Work on Fish

Whiting. 1500 fish were tagged as a part of a coordinated investigation by five countries. Market samples were collected.

Plaice. Quantitative trawlings for young plaice were continued in the Kattegat. Catch/effort statistics and market samples were collected.

Sole. Age-analyses were made in North Sea ports and catch/effort statistics collected. Pre-recruit year-class strength was investigated.

Sand-eel. Small scale market sampling was continued.

Greater weever. Market sampling was continued. Quantitative sampling of eggs and larvae with 2 m ring-net was carried out in the Kattegat in July and August.

Lumpsucker. 557 specimens were tagged with yellow Petersen discs in the western Limfjord in April.

France

(Cl. Nédélec)

Recherches à la Mer

L'Institut des Pêches Maritimes a poursuivi, en juin, avec la "Thalassa", les travaux entrepris en 1964 dans la région Shetland-Faeroë.

Une carte bathymétrique de cette région a été achevée et une autre a été entreprise dans le N.O. des Hébrides.

Des chalutages ont été faits entre 160 et 770 m. La région du chenal Shetland-Faeroë s'est révélée très pauvre en raison des eaux à 0° qui en occupaient le fond. Celle des accores du N.O. des Hébrides, du nord de l'Ecosse et des Shetland a permis des captures de lingue bleue, de sébaste et parfois de lieu noir.

En octobre, à l'occasion d'essais de pêche, des observations ont également été faites au N.O. du Dogger Bank, sur les diverses espèces capturées.

#### Germany

(G. Hempel)

##### Work at Sea

About 40 cruises with the R.V. "Uthörn" were devoted to the study in the fields of hydrography, hydro-chemistry, bacteriology and planktology within the inner German Bight. These investigations were carried out by the staff of the Biologische Anstalt Helgoland along the lines of the previous years. Further on bottom samples were taken on fixed stations within the German Bight in spring and autumn by means of the van Veen-Grab in order to study the qualitative and quantitative composition of the bottom fauna.

During cruises with the R.V. "Anton Dohrn" to the Flemish Bight and eastern part of the English Channel in January and to the German Bight in March an extensive programme for sampling fish eggs and larvae was carried out. As in 1963 and 1964 very intensive spawning of plaice in the German Bight could be observed.

##### Work on Fish

In continuation of previous investigations 5 samples of 2621 fish (=36 kg) of unsorted sand-eel catch were analysed as to species and size composition at the Institut für Küsten- und Binnenfischerei.

In continuation of the routine investigations, started in 1954, 429 samples (= 1.895 kg) of unsorted catch of the German shrimp fishery were examined by the same laboratory in order to assess the quantity of protected and unprotected fish species being caught by the German shrimp fishery.

Through October to December 8.200 juvenile plaice and 1.000 juvenile dab were tagged in German coastal waters by means of a pair of red and white soft plastic flags. The tagged fish were of the age-groups 0 and 1.

In spring, 1965, rearing experiments with the North Sea sole were started with great success at the Biologische Anstalt Helgoland, and observations on the physiological behaviour of the sole larvae and young sole were made through the whole period of the experiment.

#### Ireland

(A.E.J. Went)

##### Work at Sea

During 1965 port sampling surveys by research ship and tagging of whiting were carried out in the Irish Sea. Port sampling was undertaken in most months; and research vessel surveys, quarterly, using small mesh and cod-end covers. All samples were examined for length, age and weight. In January and February 1965, about 500 whiting were tagged off the Co. Dublin coast, during inclement weather which probably depressed the recapture rate.

Plaice investigations were continued using the "Cú Feasa" and port sampling of the catches. About 3,327 plaice were tagged and released, recaptures from which yielded valuable data on growth-rate, fishing, mortality and migration patterns.



The herring fishery at Dunmore East continued to be studied and a brief report has been submitted to the Herring Committee.

The distribution and density of sprat and sand-eel stocks in the Irish Sea were examined using the "Cú Feasa", the Department's research vessel for this purpose. A report of the sprat work has been submitted to the Sardine Committee.

#### Netherlands

(P. Korringa)

#### Work at Sea

The R.V. "Willem Beukelsz" made 16 cruises in the Committee's area. Eight cruises were mainly devoted to work within the scope of the Near Northern Seas Committee, and included work on tagging of various species.

#### Work on Fish

Plaice. The stock analysis by means of market sampling, and the tagging experiments on spawning plaice (in the Southern Bight, the Texel area, the German Bight and the Flamborough area) were continued.

In close co-operation with England the transplantation experiments between spawning areas, started in 1964, were continued.

The serological analysis of the various populations were continued.

Sole. The stock analysis by means of market sampling and racial investigations on sole from different localities in the southern North Sea were continued.

Fishermen's observations of sole swimming near the surface were collected for a continued study of the factors governing this phenomenon.

Tintownet cruises were made in the Channel and the coastal areas of Belgium, Netherlands, Germany and Denmark in order to localize the spawning grounds and to get information on the yearly egg production.

An analysis of the catches of undersized sole in the Dutch coastal area on a standard net-work of stations was made in order to be able to predict commercial catches in the near future.

Turbot and Brill. Occasionally turbot and brill were tagged together with plaice.

Whiting. The stock analysis by means of market sampling was continued.

#### (Norway)

(O. Dragesund)

#### Work at Sea

During the year 1965 three tagging cruises for spurdog were undertaken. The first and second cruises were carried out with R.V. "Peder Rønnestad" (11th January to 9th February and 4th to 21st September, respectively) and took place along the south-western coast of Norway. The first cruise also covered the Skagerrak coast.

During the period 13th October to 1st November tagging experiments were carried out along the coast of western Norway off Shetland.

In 1965 altogether 2206 spurdog were tagged, 1000 off Shetland and 1206 along the Norwegian coast.

In addition to the tagging experiments effort and catch per unit effort data have been collected.

#### Poland

See the subject committees.

Sweden

(S. Sahlin)

See the subject committees.

United Kingdom

I. England and Wales

(J.A. Gulland)

Work at Sea

As part of a comprehensive study of the plaice stock in the Irish Sea three main lines of work were carried out. The distribution of eggs and larvae over the spawning ground off Great Ormes Head was surveyed thirteen times between mid-February and late May. The study of 0-group and 1-group plaice and other flatfish was continued with regular surveys throughout the year of six bays in North Wales, Anglesey and the Isle of Man, including a more detailed study of Red Wharf Bay. During the spawning period regular trawl surveys were carried out to study the behaviour of the spawning fish. During these surveys adult plaice were tagged. Plaice tagging was also carried out in the Western English Channel where an abundance of small II-group fish was reported.

The total numbers tagged in these and other projects were:-

Species	North Sea	Irish Sea	English Channel
Plaice	2,747	6,769	738
Rays		816	35
Spurdog		21	
Flounder		500	

Work on Fish

Market sampling of the major commercial stocks was continued. The number of demersal fish (excluding gadoid fish) measured and otolithed was as follows:-

Species	North Sea		Celtic and Irish Seas		English Channel	
	Measured	Otolithed	Measured	Otolithed	Measured	Otolithed
Plaice	87,115	3,827	17,335	519	9,524	-
Sole	22,725	1,269	11,805	541	12,065	-
Turbot	6,094	-	-	-	-	-
Dogfish	All areas including		10,650	1,461	Spines } Vertebrae }	for age determination
Skates and Rays	West of Scotland		7,965	1,274		

II. Scotland

(B.B. Parrish)

Work at Sea

Fishing surveys of the North Sea and grounds around Scotland were continued as in previous years by the research ships "Explorer", "Scotia", "Mara" and "Clupea".

Data collected on these cruises, along with those collected on markets around the Scottish coast were used to provide information on the length and age compositions of the commercially exploited stocks. Additional information was provided by observers who made trips to sea on board commercial vessels.

The tagging of cod, haddock, whiting, halibut, crabs and Nephrops norvegicus was continued.

Other studies included (a) plankton and hydrographical surveys of near and middle waters, (b) studies of herring distribution in the North Sea, (c) surveys of pollution in various areas, (d) further observations on the productivity of a Scottish sea-loch, (e) investigations of the use of parasites as biological tags, (f) studies of fishing gear and of fish behaviour.

Close collaboration was maintained with the staff of the Oceanographic Laboratory of the Scottish Marine Biological Association.

Much of the data collected will be published in the Annales Biologiques and the Statistical News Letters. More details of the work carried out in the Near Northern Seas area are given in the reports to the relevant subject committees.