

SEA FISHERIES OF EUROPE

ONE of the most valuable as well as the most generally interesting of the various publications of the Conseil Permanent International pour l'Exploration de la Mer is its *Statistical Bulletin*, in which are tabulated extensive and detailed statistics relating to the sea fisheries of the maritime countries of northern and western Europe. Even in normal times, such ample and diverse data require much time and labour to assemble and work up. But in the recent years of economic instability and wildly fluctuating currency values the difficulties of such work have very greatly increased. Nevertheless, by the diligence and resourcefulness of the editor and his staff, they have all been heroically met and successfully overcome, and volume 27, presenting the data for the year 1937, has recently been published*. In order to facilitate interpretation of the mass of detailed tables, a very comprehensive and extremely lucid summary of the main conclusions to be drawn from them is given—as in previous years.

The total quantity of fish landed in 1937 from all the sea fisheries of northern and western Europe (omitting Russia but including Iceland and Faroe) was more by about 4 per cent than in the preceding year; but for the nine principal countries the gain over the preceding year was no more than 2 per cent. For these nine countries the total landings were 32 per cent above the total landings in 1913, the last year prior to the War of 1914–18, which has long been used as a standard of comparison. (Table I.)

From the British point of view the most comforting information contained in the *Bulletin* is that England, after many unsatisfactory years, at last showed an appreciable increase in landings with a rise of 7 per cent in the total catch in 1937 over 1936. But by far the largest increase was shown by Iceland with 27 per cent increase, followed by Holland with 15 per cent and Germany with 11 per cent. Both the German and English increases are shown to be due in large measure to the opening up of the Arctic trawl fishery at Bear Island and Spitsbergen.

TABLE I.

TOTAL QUANTITY OF FISH LANDED (IN '000,000 KILOS OR 1,000 TONS) AND PERCENTAGE-RATIO TO 1913.

	Total quantity				Ratio to 1913			
	1913	1935	1936	1937	1913	1935	1936	1937
England	820.5	729.9	804.0	865.4	100	89	98	105
Norway	731.5	1036.6	1146.9	1035.2	100	141	157	142
Scotland	397.6	279.7	257.3	238.8	100	70	65	60
France	193.2	261.0	275.3	313.4	100	137	143	162
Germany	181.4	468.9	569.0	632.6	100	259	314	349
Holland	147.1	119.0	160.4	185.6	100	81	109	126
Sweden	72.8	104.8	110.1	119.1	100	143	151	164
Denmark	64.4	83.5	83.6	85.5	100	130	130	133
Ireland ¹	34.4	11.4	11.5	12.8	100	33	33	37
9 countries	2642.9	3097.8	3418.1	3488.4	100	117	129	132
Iceland	92.2	266.1	261.0	332.7	100	288	283	361
Faroe Island	22.4	49.5	44.0	57.7	100	221	196	258
Finland	15.7	23.5	28.2	28.6	100	150	180	182
Belgium	13.1	36.3	36.8	35.2	100	277	281	269
13 countries	2786.3	3473.2	3788.1	3942.6	100	125	136	141

¹ Eire and Northern Ireland.

TABLE 2.

ESTIMATED VALUE PER 100 KILOS (IN PRE-WAR SHILLINGS¹) AND PERCENTAGE-RATIO TO 1913.

	Value				Ratio to 1913			
	1913	1935	1936	1937	1913	1935	1936	1937
England	24.4	30.9	26.3	21.3	100	127	108	87
Norway	8.3	6.3	5.7	6.1	100	76	69	73
Scotland	19.7	26.0	26.0	22.2	100	132	132	113
France	50.4	49.7	49.4	38.2	100	99	98	76
Germany	25.0	17.5	17.4	15.0	100	70	70	60
Holland	27.1	21.0	18.2	15.4	100	78	67	57
Sweden	23.9	24.6	21.6	17.7	100	103	90	74
Denmark	29.6	36.8	34.4	30.3	100	124	116	102
Ireland ²	17.2	27.2	25.2	20.3	100	158	147	118
9 countries	21.3	21.4	19.1	17.0	100	100	90	80
Iceland	11.5	4.5 ³	3.9 ³	3.8 ³	100	39 ³	34 ³	33 ³
Faroe Island	12.1	10.4	8.0	7.6	100	87	74	63
Finland	28.7	28.9	25.6	20.6	100	101	89	72
Belgium	36.6	36.9	38.6	35.8	100	101	105	98
13 countries	21.1	20.1	18.2	16.0	100	95	86	76

¹ Estimate based on wholesale price-index from year to year in accordance with the principles adopted by Nellemose in *Rapp. et Proc.-Verb.*, 93. "A Review of Fishery Statistics in Relation to Wholesale-Index".

² Eire and Northern Ireland.

³ Reduction too great; cost-of-living index used in lieu of wholesale index.

Concerning Scotland, however, the all too dismal tale, continued over many years, has once again to be told. For more than ten years previous to 1937 the Scottish landings had been diminishing and in that year they had fallen to less than two thirds (60 per cent) of those of 1913, and were 7 per cent less than those of 1936. Only two other countries showed diminished landings in 1937 as compared with 1936—Norway by a little and Belgium by about 5 per cent. Nevertheless, both these countries landed much more fish than in 1913—the former 1½ times and the latter 2½ times the 1913 total.

The most outstanding changes in the share of the total catch taken by each of the principal countries were shown by the British and German landings. Once more comparing 1913 with 1937, it is found that the combined shares of England, Scotland and Ireland had fallen from 45 per cent to 28.5 per cent, while Germany's share had risen from 6.5 per cent to 16.2 per cent of the whole.

In spite of formidable difficulties in ascertaining, computing, and comparing the values of the catches in the different countries, and the still greater difficulty of finding a basis of comparison with the values of former years, the attempt has been made and careful estimates based on price indexes, are presented. This done and the price of fish adjusted to the general price index, the surprising fact emerges that the value of fish per kilo, at least until 1936, appears to have changed very little since before the War of 1914–18; that is, whatever the apparent changes in market prices may have been, the relative price of fish remained much as before. Germany and Holland, however, were an exception, for in those countries the adjusted fish prices were much lower in 1936 than

* *Bulletin Statistique des Pêches Maritimes des Pays du Nord et de l'Ouest de l'Europe*. Rédigé par Sir D'Arcy Wentworth Thompson. Vol. 27 (pour l'Année, 1937). København: Andr. Fred. Høst and Fils). Kr. 3.00.

in immediately preceding years and notably lower than in 1913, probably because in these two countries the markets were better supplied than formerly and fish had become a more plentiful and cheaper food.

A still more curious and surprising thing is that the adjusted prices of 1937, as compared with those of 1913, were lower in all countries except Scotland, Ireland, and Denmark. In the first two countries fish prices appeared to remain considerably above the 1913 level; and in Denmark, although decreased by about 20 per cent in two years, they still remained above the pre-War level. In all other countries, and most notably in Germany and Holland, fish appears to have been considerably cheaper in 1937 than in 1913. In Table 2, where the prices in recent years are given and also their percentage ratio of the 1913 values, the all but universal reduction in fish prices between 1935 and 1937 is

very conspicuous. No explanation of this very remarkable fact is attempted.

From these and many other equally interesting general considerations, the *Bulletin* proceeds to give more specialized information concerning such matters as the landings of different fishes, and groups of fishes, from the numerous fishing grounds; the shares of the various participating countries in these landings; and even the seasonal fluctuations in the mean monthly landings of certain fishes of special importance, for example, plaice and sole, from the North Sea and elsewhere.

For all those with any interest in fish or fisheries, whether from the scientific or commercial point of view, the *Statistical Bulletin* is a mine of useful information most attractively presented. Not least among the many harmful results of the present War will be yet another interruption in the continuity of much of the data upon which the *Bulletin* is based.

AERIAL, GEOLOGICAL AND GEOPHYSICAL SURVEY OF NORTHERN AUSTRALIA

BY DR. L. DUDLEY STAMP

FOR roughly a century the development of tropical Australia proceeded in an atmosphere of unqualified optimism. It was almost universally believed that only capital and enterprise were needed to render richly productive of minerals and agricultural wealth the vast untenanted northern half of the continent. Agricultural successes on the well-watered coast of Queensland were used to discount a dismal succession of failures elsewhere, and a few highly successful mining enterprises caused a willing public to forget many failures. Within the last fifteen years a professor in an Australian university who dared suggest that tropical Australia was far from being an El Dorado and in any event could only be developed by permitting coloured immigrants was so pilloried by the Press that he sought refuge in resignation. But the negligible return for a huge expenditure of public money at last rendered inevitable the conclusion that all was not well, and the long reign of optimism was succeeded by a period of extreme pessimism.

In the last few years has come the realization that the whole problem of tropical Australia needs to be examined scientifically and without prejudice, using all the weapons at the command of the modern investigator. In that spirit the three Governments concerned—the Governments of the Commonwealth, Queensland and Western Australia—agreed to inaugurate a survey with the object of seeking new mineral resources in the parts of the continent lying north of 22° S. £150,000 was provided—half by the Commonwealth Government, a quarter each by the other two—and it was intended originally to devote three years to the work. It was the first time in the history of Australia that three Governments had pooled their resources for such an investigation. On September 19, 1934, a party of four (Mr. P. B. Nye, executive officer of the Survey, Mr. L. C. Ball, Queensland, Mr. F. G. Forman, Western Australia,

and Dr. W. G. Woolnough, Commonwealth geological adviser) set out on a preliminary reconnaissance flight of 12,000 miles to determine areas suitable for investigation. It was agreed that out of more than a million square miles approximately some 10,000 square miles could reasonably be covered in three years, the survey being confined to metallic minerals, particularly gold. Survey work actually began in May 1935 and falls into three parts. Aerial photography was carried out by the Royal Australian Air Force; ground surveys by three parties (in Queensland, Northern Territory and Western Australia respectively); geophysical surveys in selected areas were at first carried out under contract by the Electrical Prospecting Company of Sweden (Mr. Sepp Horvath) and later by the Survey staff itself.

The Survey has issued comprehensive progress reports every six months, beginning with a combined one for the whole period ended December 31, 1935. Those for the periods ended December 1935, 1936 and 1937 are particularly valuable as general summaries, and in the last it was pointed out that the work was far from complete and that it was to be continued during 1938. The detailed results are contained in the individual reports, of which there are thirty-nine for Western Australia, thirty-seven for the Northern Territory and thirty-five for Queensland, though all are not yet published. These 111 reports follow a uniform plan: all are issued by the Government Printer, Canberra, they are in foolscap size with appropriate maps, and set out the facts, favourable or unfavourable, on which private enterprise may assess the possibilities. Many are short—a page or two of text—and naturally most deal with ore fields previously known.

A particularly interesting report is Queensland No. 9—on the Croydon-Golden Gate area which was formerly one of the chief gold producers of Queensland and yielded £3,000,000 worth of gold before