DET NORSKE HVALRÅDS STATISTISKE PUBLIKASJONER

INTERNATIONAL WHALING STATISTICS

XIII

EDITED BY

THE COMMITTEE FOR WHALING STATISTICS
APPOINTED BY THE NORWEGIAN GOVERNMENT

OSLO 1939

Price: Kr. 200.

DET NORSKE HVALRÅDS STATISTISKE PUBLIKASJONER

INTERNATIONAL
WHALING STATISTICS

XIII

EDITED BY

THE COMMITTEE FOR WHALING STATISTICS
APPOINTED BY THE NORWEGIAN GOVERNMENT

OSLO 1939

PRINTED BY
GRØNDAHL & SØN
OSLO

CORRECTION

TO

INTERNATIONAL WHALING STATISTICS XIII

On page 11, second paragraph after Table *l*, insert the line: "No information has been obtained for the whaling off New Zealand during 1938.", and continue: "We have been informed that . . . . etc."

CONTENTS

PREFACE

The Committee published separate figures for the whaling in the Antarctic for the season 1937–38 in "International Whaling Statistics XII." In the present publication "International Whaling Statistics XIII," we present the statistics for the whaling in other areas during 1938. Volume XIII thus gives a review of the whaling in conformity with the volumes I–VII, IX, and XI of the International Whaling Statistics.

Professor dr. Johan Hjort who has been member of this Committee since it was nominated in August 1929, has resigned on January 14, 1939, and professor dr. Birger Bergersen has replaced him.

Oslo, June 2, 1939.

Gunnar Jahn. *Birger Bergersen.* *Harald B. Paulsen.*

INTRODUCTION

During the season 1937–38 the total number of whales killed in all areas amounted to 54,664, which is the largest number ever recorded. As mentioned in International Whaling Statistics, vol. XII, the number of whales killed in the Antarctic reached a maximum during the season 1937–38. On the other hand the catch in the areas outside the Antarctic decreased during the last season.

In Table *a* are given the figures for the number of whales killed in all areas during the seasons 1919–20/1937–38.

Table a.—Whales caught in the different areas.

Years.	All areas.	Antarctic.	Arctic.	Africa.	Pacific, north.	Japan.	Kamtchatka	Others.
1919–20	11,369	5,441	1,456	1,310	1,763	1,279	–	120
1920–21	12,174	8,448	310	1,263	129	1,487	–	537
1921–22	13,940	7,023	918	2,335	1,356	1,506	–	802
1922–23	18,120	9,910	1,204	3,105	1,363	1,422	–	1,116
1923–24	16,839	7,271	1,667	3,649	1,102	1,526	–	1,624
1924–25	23,253	10,488	1,523	4,384	1,892	1,875	–	3,091
1925–26	28,193	14,219	1,588	4,646	1,804	2,148	–	3,788
1926–27	24,175	12,665	1,403	4,144	2,064	1,546	–	2,353
1927–28	23,524	13,775	1,561	3,835	1,412	1,607	–	1,334
1928–29	27,896	20,341	1,159	3,362	1,241	1,463	–	330
1929–30	37,674	30,167	1,472	3,498	975	1,312	–	250
1930–31	42,874	40,201	703	823	–	1,147	–	–
1931–32	12,797	9,572	827	1,043	319	1,036	–	–
1932–33	28,668	24,327	1,004	1,168	591	1,122	203	253
1933–34	32,167	26,087	583	2,392	1,019	1,436	339	311
1934–35	39,254	31,808	568	3,004	855	1,787	487	745
1935–36	44,782	30,991	705	3,768	857	1,840	501	6,120
1936–37	51,256	34,579	1,843	3,966	730	2,066	418	7,654
1937–38	54,664	46,039	656	3,044	483	1,970	265	2,207

According to this table the catch during the last season increased by 3,408 whales, the whole of this increase, as mentioned above, being due to the larger catch in the Antarctic. It will be seen that the catch in all other areas has declined considerably. This is due to a reduced participation of floating factories and shore stations during the last season as compared with the season 1936–37. This reduced participation has probably in the first place been caused by the rulings laid down in the international agreement re. pelagic whaling north of 40° South lat. The unfavourable market-

prospects for whale oil in spring 1938 has also most likely contributed to the reduced participation in these areas.

In Table *b* is given the percentage of whales killed in the Antarctic and in other areas during the seasons 1928–29/1937–38.

Table b.—Whales caught in the Antarctic and other areas.

Years.	All areas.	Antarctic.		Other areas.	
		Number.	Per cent.	Number.	Per cent.
1928–29	27,896	20,341	72.9	7,555	27.1
1929–30	37,674	30,167	80.1	7,507	19.9
1930–31	42,874	40,201	93.8	2,673	6.2
1931–32	12,797	9,572	74.8	3,225	25.2
1932–33	28,668	24,327	84.9	4,341	15.1
1933–34	32,167	26,087	81.1	6,080	18.9
1934–35	39,254	31,808	81.0	7,446	19.0
1935–36	44,782	30,991	69.2	13,791	30.8
1936–37	51,256	34,579	67.5	16,677	32.5
1937–38	54,664	46,039	84.2	8,625	15.8

It will be seen from the table above that the percentage of the number of whales killed outside the Antarctic decreased to half the previous season's catch.

In Table *c* is given the oil production in the Antarctic as compared with that in other areas.

Table c.—Oil production 1928–29/1937–38.

Years.	All areas.	Antarctic.		Other areas.	
		Number of barrels.	Per cent.	Number of barrels.	Per cent.
	Barrels. [1]				
1928–29	1,886,082	1,631,340	86.5	254,742	13.5
1929–30	2,799,042	2,546,759	91.0	252,283	9.0
1930–31	3,686,976	3,608,348	97.9	78,628	2.1
1931–32	915,842	808,560	88.3	107,282	11.7
1932–33	2,596,778	2,456,462	94.6	140,316	5.4
1933–34	2,573,155	2,395,544	93.1	177,611	6.9
1934–35	2,691,283	2,453,999	91.2	237,284	8.8
1935–36	2,871,117	2,436,338	84.9	434,779	15.1
1936–37	3,210,671	2,658,108	82.8	552,563	17.2
1937–38	3,635,010	3,340,330	91.9	294,680	8.1

[1]) Barrel = 1/6 ton (1 ton = 1,016 kg.).

From these two tables we learn that during the season 1937–38 15.8 per cent of all whales were killed outside the Antarctic, whereas the oil production of the catch in these areas amounted to 8.1 per cent only. Thus the oil production per whale has in the last season, as in the former years, been smaller in the areas outside the Antarctic. As mentioned in International Whaling Statistics, vol. XI, this is partly due to the different composition by species of whales killed in the Antarctic and in the other areas,

and partly to the fact that the output of oil is less for nearly all the species of whales killed in tropical waters than for whales killed in the Antarctic.

In the total oil production in 1937/38—3,635,010 barrels—134,896 barrels of sperm-oil are included. In Table *d* are given separate figures for the total production of oil and the sperm-oil on the different grounds during the seasons 1935–36, 1936–37, and 1937–38.

Table d.—Sperm-oil production in 1935/36—1937/38.

Grounds.	1937—38 and summer 1938.		1936–37 and summer 1937.		1935–36 and summer 1936.	
	Total oil production.	Of which sperm-oil.	Total oil production.	Of which sperm-oil.	Total oil production.	Of which sperm-oil.
	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.
Sum Antarctic	3,340,330	51,567	2,658,108	53,160	2,436,338	23,755
Sum outside Antarctic	294,680	83,329	552,563	185,802	434,779	138,204
Total	3,635,010	134,896	3,210,671	238,962	2,871,117	161,959
of which						
British production	1,305,624	44,469	1,285,954	151,982	1,238,688	101,387
Norwegian production	1,169,069	29,458	1,191,772	32,561	1,162,742	19,741
Prod. of other countries	1,160,317	60,969	732,945	54,419	469,687	40,831
South Georgia	90,266	2,656	81,629	3,707	143,185	126
Antarctic (pelagic whaling)	3,250,064	48,911	2,576,479	49,453	2,293,153	23,629
Coast of Africa:						
Coast of Natal	54,352	15,623	67,979	14,871	64,570	26,908
Cape Colony	—	—	34,515	8,146	31,799	4,350
Coast of Congo	—	—	13,778	—	38,712	1,367
South of Madagascar	84,750	1,210	53,500	—	—	—
Atlantic and Arctic:						
Portugal	7,284	—	—	—	—	—
Coast of Norway	11,076	568	9,467	1,548	7,997	1,092
Iceland	4,920	1,048	2,862	1,136	3,415	257
Faroe Islands	3,254	251	3,199	254	2,972	572
New Foundland	—	—	19,075	825	7,186	914
Pelagic { South of Iceland	—	—	9,862	1,690	—	—
Pelagic { Davis Strait	—	—	22,513	11,173	—	—
Pacific (north):						
Alaska	9,734	3,638	17,668	3,365	17,325	3,873
British Columbia	13,157	11,522	14,719	13,459	16,969	15,237
California	—	—	1,002	—	2,602	112
Coast of Peru	12,869	12,869	95,831	88,612	61,853	49,880
Coast of Chile	8,279	[1] 5,735	5,925	4,309	8,789	2,640
Coast of Kamtchatka	9,102	2,968	[1] 16,480	[1] 9,504	18,238	5,421
Coast of Japan and Corea	33,353	27,897	32,425	26,793	30,144	25,031
Coast of West Australia	42,550	—	131,763	117	122,208	550

[1] The quantity of oil has been calculated as no information was to hand re. oil production.

These figures show that the sperm-oil production, which is of great importance in the areas outside the Antarctic, has declined during the last season. Of a total oil production of 294,680 barrels in these areas 83,329

barrels—or 28 per cent—were sperm-oil. The percentage of the sperm-oil production as compared with the total oil production in these areas during the two former seasons was: in 1935–36 32 per cent and in 1936–37 34 per cent.

Table e.—North Atlantic and Arctic.

Grounds.	Years.	Species of whales caught.							Oil production.	Expeditions.		
		Blue.	Fin.	Humpback.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
									Barrels.			
North Atlantic and Arctic. Total	1931	54	541	43	60	5	–	703	25,268	2	2	14
	1932	62	658	14	83	6	[2]) 4	827	28,590	3	2	17
	1933	59	854	9	29	53	–	1,004	34,833	3	3	19
	1934	25	357	5	185	11	–	583	16,038	3	1	13
	1935	10	385	17	125	25	[1]) 6	568	15,341	7	–	17
	1936	31	445	15	158	47	[1]) 9	705	21,570	8	–	20
	1937	56	1,274	24	171	282	[3])36	1,843	66,978	8	2	34
	1938	15	475	1	104	34	[1])27	656	19,250	6	–	19
Faroe Islands.	1933	6	91	–	7	3	–	107	3,243	1	–	2
	1934	2	74	–	13	7	–	96	3,013	1	–	2
	1935	3	75	2	3	5	–	88	2,997	1	–	2
	1936	2	65	–	1	9	–	77	2,972	1	–	3
	1937	6	86	3	9	4	–	108	3,199	1	–	3
	1938	2	94	–	5	5	–	106	3,254	1	–	3
Iceland.	1935	2	25	–	1	–	–	28	691	1	–	2
	1936	5	72	–	1	7	–	85	3,415	1	–	2
	1937	1	56	1	–	21	–	79	2,862	1	–	2
	1938	9	113	–	5	20	–	147	4,920	1	–	3
Coast of Norway.	1931	2	69	–	52	5	–	128	3,399	2	–	6
	1932	23	190	1	59	6	–	279	8,431	3	–	9
	1933	7	197	1	22	9	–	236	6,585	2	–	6
	1934	–	132	–	172	4	–	308	6,305	2	–	6
	1935	1	106	–	108	4	[1]) 6	225	4,488	3	–	10
	1936	4	147	–	154	17	[1]) 9	331	7,997	4	–	12
	1937	9	223	–	55	20	[1]) 35	342	9,467	4	–	12
	1938	4	261	–	94	9	[1]) 27	395	11,076	4	–	12
Pelagic whaling in Arctic.	1931	52	456	39	8	–	–	555	21,869	–	2	7
	1932	38	443	9	24	–	[2]) 4	518	20,159	–	2	7
	1933	43	549	7	–	41	–	640	25,005	–	3	10
	1934	21	128	3	–	–	–	152	6,720	–	1	4
	–	–	–	–	–	–	–	–	–	–	–	–
	1937	28	461	7	100	218	–	814	32,375	–	2	11
Coast of West Greenland.	1931	–	16	4	–	–	–	20	–	–	–	1
	1932	1	25	4	–	–	–	30	–	–	–	1
	1933	3	17	1	–	–	–	21	–	–	–	1
	1934	2	23	2	–	–	–	27	–	–	–	1
	1935	–	23	6	–	–	–	29	–	–	–	–
	1936	–	15	5	–	–	–	20	–	–	–	–
	1937	4	9	4	–	–	–	17	–	–	–	1
	1938	–	7	1	–	–	–	8	–	–	–	1
New Foundland.	1935	4	156	9	13	16	–	198	7,165	2	–	3
	1936	20	146	10	2	14	–	192	7,186	2	–	3
	1937	8	439	9	7	19	[2]) 1	483	19,075	2	–	5

[1]) Different kinds of small whales. [2]) Right-whales. [3]) Different kinds of small whales and 1 right-whale.

Whaling outside the Antarctic has in 1938 been carried on in the North Atlantic and Arctic, off the Azores, off the coast of Africa, in the Pacific North, off Japan, Kamtchatka, Chile and Peru, West Australia, and New Zealand.

The whaling in the North Atlantic and Arctic after a considerable increase in 1937 has again fallen off to approximately the catch of the seasons 1934, 1935, and 1936. This is principally a consequence of the reduced whaling equipment. In 1937 8 shore stations and 2 floating factories carried on whaling with 34 catchers in these waters, whereas in 1938 only 6 shore stations with 19 catchers were employed. Table *e* gives the catch by species and hunting grounds for the years 1931–38.

According to this table the Faroe Islands maintained its position of the previous season. The whaling off Iceland, on the other hand, was double that of the previous year as to the number of whales killed. The one shore station carrying on whaling in these waters operated with 3 catchers in the last season against 2 in the previous seasons, but the output per boat is nevertheless larger in 1937–38 regarding the number of whales as well as the production of oil. As to the coast of Norway, the figures also show a larger output per boat. Here the equipment has been the same as in the two former seasons. The whaling off the coast of West Greenland was carried on in 1938 with 1 catcher, and is quite insignificant. No pelagic whaling was carried on in North Atlantic waters during the last season, probably a consequence of the international agreement and the prevailing conditions on the oil-market as referred to above.

The principal species of whales killed in North Atlantic and Arctic are fin-whales, 475 of the 656 whales killed.

Since 1933 whaling on a small scale has been carried on off the Azores, the particulars of which are given in Table *f* below.

Table f.—Portugal (Azores).

Years	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Humpback	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrels.			
1933	–	–	–	–	77	[1])176	253	–	–	–	[2])–
1934	–	–	–	–	82	[1])158	240	–	–	–	[2])–
1935	–	–	–	–	136	[3])140	276	–	–	–	[2])–
1936	–	–	–	–	172	[3])308	[4])480	–	–	–	[2])–
1937	–	–	–	–	80	[3])208	[5])288	–	–	–	[2])–
1938	–	–	–	–	–	[3])388	[6])388	7,284	–	–	[2])–

[1]) Different kinds of small whales. [2]) Whaling is carried on with row-boats on old lines. [3]) No specification. [4]) The whales have been caught during the period 1/9 1935—31/12 1936. [5]) The whales have been caught during the period 1/1–30/11 1937. [6]) Probably a small number of whales has also been caught from the island of São Miguel and perhaps also from some others of the islands of Azores, but no information is available.

The whaling off the coast of Africa is given by species and hunting grounds for a series of years in Table *g*.

Table g.—Africa.

Grounds.	Years.	Species of whales caught.							Oil production.	Expeditions.		
		Blue.	Fin.	Humpback.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
									Barrels			
Africa. Total.	1931	122	466	71	29	135	–	823	37,086	1	–	10
	1932	109	345	309	23	256	[1] 1	1,043	44,112	1	–	8
	1933	85	602	162	11	306	[1] 2	1,168	53,000	2	–	14
	1934	71	557	1,238	57	467	[1] 2	2,392	82,359	3	–	21
	1935	122	526	1,659	100	595	[1] 2	3,004	117,950	2	3	27
	1936	120	1,095	1,168	305	1,073	[2] 7	3,768	135,081	3	3	43
	[3] 1937	128	1,175	1,789	121	710	[4] 43	3,966	169,772	3	2	39
	[3] 1938	40	538	1,927	66	473	–	3,044	139,102	1	1	22
Coast of Natal.	1931	122	466	71	29	135	–	823	37,086	1	–	10
	1932	109	345	309	23	256	[1] 1	1,043	44,112	1	–	8
	1933	85	602	162	11	306	[1] 2	1,168	53,000	2	–	14
	1934	70	536	514	30	422	[1] 2	1,574	60,924	2	–	17
	1935	122	526	418	90	595	[1] 2	1,753	67,008	2	–	17
	1936	41	528	301	68	911	–	1,849	64,570	2	–	18
	1937	67	755	240	64	503	–	1,629	67,979	2	–	16
	1938	39	536	175	64	425	–	1,239	54,352	1	–	16
Cape Colony.	1936	79	566	27	214	108	[2] 7	1,001	31,799	1	–	14
	1937	57	398	28	49	207	[4] 43	782	34,515	1	–	13
Coast of Congo.	1934	1	21	724	27	45	–	818	21,435	1	–	4
	1935	–	–	1,241	10	–	–	1,251	50,942	–	3	10
	1936	–	1	840	23	54	–	918	38,712	–	3	11
	1937	–	–	298	–	–	–	298	13,778	–	1	4
South of Madagascar	1937	4	22	1,223	8	–	–	1,257	53,500	–	1	6
	1938	1	2	1,752	2	48	–	1,805	84,750	–	1	6

[1]) Right-whales. [2]) Bryde-whales. [3]) Including South of Madagascar. [4]) 7 right-whales and 36 Bryde-whales.

The total number of whales killed and the output of oil show a decrease from the last season of 922 and 30,670, respectively. The principal species killed off Africa are in 1938 as in former seasons humpbacks, the total number being 1,927—the largest recorded for later years. The great number of humpbacks killed is mainly attributable to the pelagic whaling on the new hunting grounds south of Madagascar, which commenced in 1937. Of a total of 1,805 whales killed, 1,752 were humpbacks. The catch off the coast of Natal has decreased from 1,629 in 1937 to 1,239 during the last season. As in previous years the catch of fin- and sperm-whales is here of greater importance than that of humpbacks. No whaling was carried on off the Cape Colony and Congo—presumably for the reasons referred to above.

In the Pacific North the number of whales killed has declined from 730 in 1937 to 483 in 1938. In Table *h* are given details of the catch by species and hunting grounds.

Table h.—Pacific North.

Grounds.	Years.	Species of whales caught.							Oil production.	Expeditions.		
		Blue.	Fin.	Humpback.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
									Barrels.			
Pacific North. Total.	1933	1	17	1	–	190	[1]) 382	591	24,080	2	1	9
	1934	–	–	–	–	–	[1])1,019	1,019	43,100	4	1	15
	1935	140	117	148	6	253	[2]) 191	855	38,784	3	2	16
	1936	44	208	132	–	377	[1]) 96	857	36,896	4	1	15
	1937	54	228	114	13	321	–	730	33,389	4	1	14
	1938	37	115	16	–	315	–	483	22,891	3	–	11
Alaska.	1933	–	–	–	–	–	[1]) 182	182	6,420	1	–	3
	1934	–	–	–	–	–	[1]) 464	464	18,600	2	–	7
	1935	87	94	141	–	70	[3]) 2	394	19,485	2	–	7
	1936	41	160	118	–	66	–	385	17,325	2	–	7
	1937	45	170	104	1	56	–	376	17,668	2	–	6
	1938	33	65	12	–	63	–	173	9,734	1	–	5
British Columbia.	1933	1	17	1	–	190	–	209	11,500	1	–	4
	1934	–	–	–	–	–	[1]) 350	350	18,300	2	–	6
	1935	6	20	1	–	175	–	202	10,334	1	–	4
	1936	3	48	14	–	311	–	376	16,969	2	–	6
	1937	1	44	7	–	265	–	317	14,719	2	–	6
	1938	4	50	4	–	252	–	310	13,157	2	–	6
California.	1933	–	–	–	–	–	[1]) 200	200	6,160	–	1	2
	1934	–	–	–	–	–	[1]) 205	205	6,200	–	1	2
	1935	–	–	–	–	–	[1]) 189	189	5,144	–	1	2
	1936	–	–	–	–	–	[1]) 96	96	2,602	–	1	2
	1937	8	14	3	12	–	–	37	1,002	–	1	2
Coast of Mexico.	1935	47	3	6	6	8	–	70	3,821	–	1	3

[1]) No specification. [2]) 2 right-whales and 189 without specification. [3]) Right-whales.

It will be seen that in 1938 whaling has been carried on off Alaska and British Columbia only. The principal species killed are sperm-whales —315—and fin-whales—115. The blue-whale and humpback catch is of minor importance, the number of whales killed being 37 and 16 respectively.

During the last 6 seasons there has been a continual rise in the number of whales killed off the coast of Japan and Corea until and including 1937. During the last season, although the number of whales killed slightly decreased, the output of oil is the largest ever recorded for these areas. A distribution by species of whales is given in Table *i*.

The principal species killed in the last season are sperm-whales—785, sei-whales—553, and fin-whales—293. The catch of humpbacks and blue-whales is quite insignificant, 60 and 4 respectively, whereas the catch of smaller whales of different species amounted to 275 in the last season.

Since 1933 whaling has been carried on off Kamtchatka. In 1938 only 265 whales were killed against 418 in 1937. A classification of this catch by species is given in Table *j*.

Table i.—Japan and Corea.

Years.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Humpback.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrels.			
1931 . .	20	337	70	418	283	[1] 19	1,147	16,274	–	–	20
1932 . .	17	270	90	370	268	[2] 21	1,036	20,230	–	–	20
1933 . .	10	299	89	388	331	[3] 5	1,122	21,698	–	–	ca.20
1934 . .	21	287	59	298	357	[4]414	1,436	22,766	–	–	21
1935 . .	21	273	70	380	479	[4]564	1,787	29,178	–	–	21
1936 . .	3	241	72	348	549	[4]627	1,840	30,144	17	–	23
1937 . .	12	300	68	435	640	[5]611	2,066	32,425	8	–	24
1938 . .	4	293	60	553	785	[6]275	1,970	33,353	21	–	25

[1]) 11 grey-whales and 8 right-whales. [2]) 7 grey-whales and 14 right-whales. [3]) 2 grey-whales and 3 right-whales. [4]) No specification. [5]) Different kinds of small whales and 5 right-whales. [6]) Different kinds of small whales and 2 right-whales.

Table j.—Kamtchatka.

Years	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Humpback.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrels.			
1933	–	–	–	–	–	[1]203	203	6,705	–	1	3
1934	2	150	51	1	74	[2] 61	339	12,168	–	1	3
1935	1	206	143	–	–	[3]137	487	19,398	–	1	3
1936	5	210	68	–	113	[4]105	501	18,238	–	1	3
1937	–	142	65	1	198	[5] 12	418	[6]16,480	–	1	3
1938	–	104	43	–	64	[7] 54	265	9,102	–	1	3

[1]) No specification, mostly fin-whales. [2]) 54 grey-whales, 6 bottlenoses and 1 «Minke-whale». [3]) No specification. [4]) 102 grey-whales and 3 without specification. [5]) 11 grey-whales and 1 right-whale. [6]) The quantity of oil has been calculated as no information was to hand re. oil production. [7]) Grey-whales.

The principal species killed in the last season were fin-whales—104, sperm-whales—64, and humpbacks—43. The grey-whale, which on these grounds has formed an important part of the total catch, greatly decreased in 1937, but again increased during the last season.

Table k.—Coast of Chile and Peru.

Years	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Humpback.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrels.			
1927	199	294	22	–	156	[1] 260	931	36,920	1	1	10
1928	–	–	–	–	–	[1]ca. 300	ca. 300	14,019	1	–	4
1929	–	–	–	–	–	[1]ca. 330	ca. 330	18,234	1	–	4
1930	–	–	–	–	–	[1]ca. 250	ca. 250	12,364	1	–	4
1935	40	71	29	85	173	[2] 71	469	16,633	3	1	5
1936	174	235	18	10	2,109	[3] 1	2,547	70,642	2	2	19
1937	81	130	18	3	3,888	–	4,120	101,756	[4]) 2	3	[4]) 25
1938	15	56	6	44	767	[3] 14	902	21,148	[5]) –	[5]) 1	[5]) 8

[1]) No specification. [2]) Different kinds of small whales and 36 right-whales. [3]) Right-whales. [4]) The figures for the land stations on the coast of Chile and the number of catchers attached thereto are not confirmed by the companies. [5]) No information as to the material in operation off the coast of Chile.

In Table *k* are given particulars as to the whaling off the coast of Chile and Peru in later years. For 1938 we have not succeeded in getting figures directly from the companies which carry on whaling from the coast of Chile. According to information from Chile a Chilean whaling company has this year been operating with a new floating factory and three catchers. The Direccion de Pesca y Caza has forwarded us some data with regard to whaling from coast of Chile during the year 1938, but this institution has given no information as to the whaling equipment. We, therefore, do not know whether the above mentioned figures do include an eventual production of the new floating factory or not.

The great decline in the catch from the coast of Chile and Peru is due to the fact that only one floating factory has been operating off the coast of Peru this year, as compared with 3 floating factories last year.

The whaling off the coast of West-Australia was carried on in 1938 by 1 floating factory only—with 6 catchers. The result of this whaling is given in Table *l*.

Table l.—Coast of West Australia.

Years	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore sta-tions.	Float-ing fac-tories.	Catch-ers.
								Barrels.			
1925	–	–	669	–	–	–	669	19,300	1	–	3
1926	5	–	735	–	–	–	740	21,300	1	–	3
1927	3	–	996	–	–	–	999	32,179	1	–	4
1928	1	–	1,033	–	–	–	1,034	35,340	1	–	4
1936	–	7	3,072	–	14	–	3,093	122,208	–	2	12
1937	–	1	3,242	–	3	–	3,246	131,763	–	2	14
1938	–	–	917	–	–	–	917	42,550	–	1	6

As will be seen, the Australian whaling has in 1938 as in former years been based entirely upon the stock of humpbacks. The figures show a considerable decrease, also in the number of whales per boat, but the oil output per whale has increased.

We have been informed that whaling on a small scale has been carried on in these waters for some years. We understand that information about these operations will be available for later publications.

A survey of the whales killed classified by species and sex in some of the areas outside the Antarctic is given in Table *m*.

The average size of blue-whales, fin-whales, humpbacks, and sperm-whales for some of the areas outside the Antarctic is given in Table *n*.

The whaling results for the various countries in 1937–38 and summer 1938 is given in Table no. 7, page 19. In Table *o* below is given a survey of the number of whales killed and the output of oil for the principal countries since 1929–30.

Table m.—Sex of whales caught.

Kind of whale and whaling grounds.		1938.	1937.	1936.	1935.	1934.
	Blue-whales.					
Coast of Africa	Males	19	62	34	59	30
	Females	20	57	45	63	40
	Total animals	39	119	79	122	70
	Males per 100 females	95	109	76	94	75
	Fin-whales.					
Coast of Africa	Males	287	660	293	297	306
	Females	249	515	273	229	230
	Total animals	536	1,175	566	526	536
	Males per 100 females	116	128	107	130	133
North Atlantic and Arctic	Males	254	439	211	92	154
	Females	220	396	234	110	180
	Total animals	474	835	445	202	334
	Males per 100 females	115	111	90	84	86
	Humpbacks.					
Coast of Africa	Males	87	1,056	378	935	–
	Females	88	733	489	724	–
	Total animals	175	1,789	867	1,659	–
	Males per 100 females	99	144	77	129	–
Coast of West Australia	Males	517	2,071	2,138	–	–
	Females	400	1,171	934	–	–
	Total animals	917	3,242	3,072	–	–
	Males per 100 females	129	177	229	–	–
	Sperm-whales.					
Coast of Africa	Males	347	416	–	–	–
	Females	78	294	–	–	–
	Total animals	425	710	–	–	–
	Males per 100 females	445	141	–	–	–

It will be seen that the British Empire during the last season as well as during the 3 former seasons has surpassed Norway in the number of whales killed as well as in the output of oil. In International Whaling Statistics, vol. XI and XII we emphasized the growing importance of the whaling of other countries. During the last season the participation of other countries increased further, and their share of the total yield reached the British and Norwegian level. The number of whales killed amounted to 36.3 per cent of the total catch against 20.7 per cent in 1935–36 and 27.3 per cent in 1936–37, and the output of oil to 31.9 per cent of the total oil production against 16.3 per cent in 1935–36 and 22.9 per cent in 1936–37. This considerable increase in the whaling of other countries is in the first place due to the continual development of Japan's and Germany's pelagic whaling in the Antarctic. Looking at the percentage figures we note that Japan's share during the last season increased to 13.8 per

Table n.—Average size of whales caught.

Kind of whale and whaling grounds.	1938.	1937.	1936.	1935.	1934.	1933.	1932.
	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.
Blue-whales.							
Coast of Africa:—							
Natal	67.00	66.23	–	67.43	67.06	67.21	66.67
Hanglip	–	–	69.04	–	–	–	–
Saldanha Bay	–	66.74		–	–	–	–
North Atlantic and Arctic:							
Pelagic whaling	–	73.29	–	–	75.33	74.24	73.47
Faroe Islands	68.00	–	–	64.00	–	–	–
New Foundland	–	–	70.70	–	–	–	–
Alaska	75.30	74.09	77.41	–	–	–	–
British Columbia	73.75	–	–	–	–	–	–
Coast of Mexico	–	–	–	65.57	–	–	–
Coast of Peru	–	70.99	73.00	–	–	–	–
Fin-whales.							
Coast of Africa:—							
Natal	60.14	59.91	–	60.70	60.03	60.02	59.69
Hanglip	–	–	57.02	–	–	–	–
Saldanha Bay	–	59.91		–	–	–	–
North Atlantic and Arctic:							
Pelagic whaling	–	62.52	–	–	61.66	62.35	63.38
Whaling from coast	62.08	62.11	60.66	59.23	59.65	59.40	–
Alaska	59.62	58.19	59.23	–	–	–	–
British Columbia	57.82	–	–	–	56.44	–	–
Coast of Mexico	–	–	–	59.33	–	–	–
Coast of Peru	–	57.75	57.65	–	–	–	–
Humpbacks.							
Coast of Africa:—							
Natal	36.41	36.53	–	36.51	–	–	–
Saldanha Bay	–	40.04	40.59	–	–	–	–
Coast of Congo	–	38.73	39.13	36.66	–	–	–
South of Madagascar	–	39.19	–	–	–	–	–
Alaska	38.17	39.68	40.67	–	–	–	–
British Columbia	35.50	–	–	–	–	–	–
Coast of West Australia	39.37	39.60	38.75	–	–	–	–
Sperm-whales.							
Coast of Africa:—							
Natal	42.12	38.47	–	–	–	–	–
Cape Colony	–	43.36	–	–	–	–	–
North Atlantic and Arctic:							
Pelagic whaling	–	50.37	–	–	–	–	–
Whaling from coast	53.15	–	–	–	–	–	–
Alaska	49.19	48.54	–	–	–	–	–
British Columbia	46.44	–	–	–	–	–	–
Coast of Peru	–	35.91	–	–	–	–	–

cent of the total number of whales killed and to 11.6 per cent of the total oil production. Germany commenced pelagic whaling in the Antarctic in 1936–37, and during the last season its share increased to 10.7 per cent of all whales killed—against 1.8 per cent in 1936–37—and to 10.2 per cent of the aggregate output of oil—against 1.9 per cent in 1936–37.

Table 0.—Whaling results for the various countries 1929/30—1937/38.

			All areas.	British Empire.	Norway.	Panama.	Japan.	United States.	Denmark.	Germany.	Argentine.	Soviet Russia.	Chile.	Others.
Absolute figures	*Number of whales*	1929/30..	37,674	12,204	21,609	–	[1]) 1,312	655	258	–	1,386	–	ca. 250	–
		1930/31..	42,874	13,019	25,952	–	1,147	536	1,046	–	1,174	–	–	–
		1931/32..	12,797	9,765	797	–	1,036	319	30	–	850	–	–	–
		1932/33..	28,668	12,940	12,644	–	1,122	382	128	–	996	203	–	253
		1933/34..	32,167	14,564	13,657	–	1,436	669	123	–	1,139	339	–	240
		1934/35..	39,254	17,476	16,939	–	2,000	583	117	–	809	487	469	374
		1935/36..	44,782	19,850	15,670	2,449	2,479	1,989	97	–	944	501	238	565
		1936/37..	51,256	21,331	15,943	2,389	4,025	3,659	1,022	920	1,014	418	168	367
		1937/38..	54,664	19,465	15,355	1,527	7,552	2,650	114	5,839	1,062	265	300	535
	Oil production in barrels	1929/30..	2,799,042	856,797	1,796,221	–	[2]) ?	29,437	8,772	–	95,451	–	12,364	–
		1930/31..	3,686,976	1,131,231	2,316,962	–	16,274	49,360	84,995	–	88,154	–	–	–
		1931/32..	915,842	803,955	28,590	–	20,230	14,350	–	–	48,717	–	–	–
		1932/33..	2,596,778	1,180,526	1,317,443	–	21,698	12,580	3,243	–	54,583	6,705	–	–
		1933/34..	2,573,155	1,190,924	1,253,694	–	22,766	24,800	3,013	–	65,790	12,168	–	–
		1934/35..	2,691,283	1,288,554	1,239,327	–	42,133	24,629	2,997	–	53,100	19,398	16,633	4,512
		1935/36..	2,871,117	1,238,688	1,162,742	205,801	74,289	80,991	2,972	–	75,192	18,238	8,789	3,415
		1936/37..	3,210,671	1,285,954	1,191,772	181,495	189,012	150,433	77,369	61,992	47,377[3])	16,480	5,925	2,862
		1937/38..	3,635,010	1,305,624	1,169,069	117,650	422,036	166,299	3,254	369,727	51,766	9,102	8,279	12.204
Percentage figures	*Number of whales*	1929/30..	100.0	32.4	57.3	–	3.5	1.7	0.7	–	3.7	–	ca. 0.7	–
		1930/31..	100.0	30.4	60.5	–	2.7	1.3	2.4	–	2.7	–	–	–
		1931/32..	100.0	76.3	6.2	–	8.1	2.5	0.2	–	6.7	–	–	–
		1932/33..	100.0	45.1	44.1	–	3.9	1.3	0.5	–	3.5	0.7	–	0.9
		1933/34..	100.0	45.3	42.4	–	4.5	2.1	0.4	–	3.5	1.1	–	0.7
		1934/35..	100.0	44.5	43.1	–	5.1	1.5	0.3	–	2.1	1.2	1.2	1.0
		1935/36..	100.0	44.3	35.0	5.5	5.5	4.5	0.2	–	2.1	1.1	0.5	1.3
		1936/37..	100.0	41.6	31.1	4.7	7.9	7.1	2.0	1.8	2.0	0.8	0.3	0.7
		1937/38..	100.0	35.6	28.1	2.8	13.8	4.8	0.2	10.7	1.9	0.5	0.6	1.0
	Oil production	1929/30..	100.0	30.6	64.2	–	?	1.1	0.3	–	3.4	–	0.4	–
		1930/31..	100.0	30.7	62.8	–	0.5	1.3	2.3	–	2.4	–	–	–
		1931/32..	100.0	87.8	3.1	–	2.2	1.6	–	–	5.3	–	–	–
		1932/33..	100.0	45.5	50.7	–	0.8	0.5	0.1	–	2.1	0.3	–	–
		1933/34..	100.0	46.3	48.7	–	0.9	1.0	0.1	–	2.5	0.5	–	–
		1934/35..	100.0	47.9	46.0	–	1.6	0.9	0.1	–	2.0	0.7	0.6	0.2
		1935/36..	100.0	43.2	40.5	7.2	2.6	2.8	0.1	–	2.6	0.6	0.3	0.1
		1936/37..	100.0	40.0	37.1	5.7	5.9	4.7	2.4	1.9	1.5	0.5	0.2	0.1
		1937/38..	100.0	35.9	32.2	3.2	11.6	4.6	0.1	10.2	1.4	0.3	0.2	0.3

[1]) Catch January—September. [2]) Small production of oil owing to extensive use of the whale for human food. [3]) The figure is calculated as no information was to hand re. oil production.

Table p.—World-production of whale oil in the years 1909/10—1937/38.

Years.	Total production.	Antarctic.	Arctic.	Africa.	Other grounds.
	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.
1909/10	284,320	157,592	67,590	48,138	11,000
1910/11	498,498	291,169	59,423	126,106	21,800
1911/12	669,743	371,455	40,118	195,168	63,002
1912/13	766,237	428,573	33,503	242,838	61,323
1913/14	804,118	432,061	30,351	183,136	158,570
1914/15	705,464	498,843	15,367	89,354	101,900
1915/16	699,669	558,806	5,125	54,953	80,785
1916/17	403,112	363,827	—	26,311	12,974
1917/18	385,855	258,476	22,338	26,940	78,101
1918/19	417,245	245,692	20,622	46,500	104,431
1919/20	407,327	272,817	35,989	51,921	46,600
1920/21	471,141	390,627	6,661	48,453	25,400
1921/22	639,276	452,517	23,095	76,680	86,984
1922/23	817,314	614,547	30,446	99,073	73,248
1923/24	716,246	464,678	41,563	125,732	84,273
1924/25	1,040,408	697,091	38,208	150,985	154,124
1925/26	1,152,536	783,307	42,732	139,754	186,743
1926/27	1,191,922	872,362	43,927	135,031	140,602
1927/28	1,321,313	1,037,392	48,854	135,229	99,838
1928/29	1,886,082	1,631,340	39,729	145,065	69,948
1929/30	2,799,042	2,546,759	53,694	144,446	54,143
1930/31	3,686,976	3,608,348	25,268	37,086	16,274
1931/32	915,842	808,560	28,590	44,112	34,580
1932/33	2,596,778	2,456,462	34,833	53,000	52,483
1933/34	2,573,155	2,395,544	16,038	82,359	79,214
1934/35	2,691,283	2,453,999	15,341	117,950	103,993
1935/36	2,871,117	2,436,338	21,570	135,081	278,128
1936/37	3,210,671	2,658,108	66,978	116,272	369,313
1937/38	3,635,010	3,340,330	19,250	54,352	221,078
1909/10—1937/38	40,257,700	33,527,620	927,203	2,932,025	2,870,852
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1909/10	100.0	55.4	23.8	16.9	3.9
1910/11	100.0	58.4	11.9	25.3	4.4
1911/12	100.0	55.5	6.0	29.1	9.4
1912/13	100.0	55.9	4.4	31.7	8.0
1913/14	100.0	53.7	3.8	22.8	19.7
1914/15	100.0	70.7	2.2	12.7	14.4
1915/16	100.0	79.9	0.7	7.9	11.5
1916/17	100.0	90.2	—	6.5	3.3
1917/18	100.0	67.0	5.8	7.0	20.2
1918/19	100.0	58.9	4.9	11.1	25.1
1919/20	100.0	67.0	8.8	12.7	11.5
1920/21	100.0	82.9	1.4	10.3	5.4
1921/22	100.0	70.8	3.6	12.0	13.6
1922/23	100.0	75.2	3.7	12.1	9.0
1923/24	100.0	64.9	5.8	17.6	11.7
1924/25	100.0	67.0	3.7	14.5	14.8
1925/26	100.0	68.0	3.7	12.1	16.2
1926/27	100.0	73.2	3.7	11.3	11.8
1927/28	100.0	78.5	3.7	10.2	7.6
1928/29	100.0	86.5	2.1	7.7	3.7
1929/30	100.0	91.0	1.9	5.2	1.9
1930/31	100.0	97.8	0.7	1.0	0.5
1931/32	100.0	88.3	3.1	4.8	3.8
1932/33	100.0	94.6	1.3	2.1	2.0
1933/34	100.0	93.1	0.6	3.2	3.1
1934/35	100.0	91.2	0.6	4.4	3.8
1935/36	100.0	84.9	0.8	4.6	9.7
1936/37	100.0	82.8	2.1	3.6	11.5
1937/38	100.0	91.9	0.5	1.5	6.1
1909/10—1937/38	100.0	83.3	2.3	7.3	7.1

[1]) Barrel = 1/6 ton (1 ton = 1,016 kg.).

Table *p* gives a survey of the world production of whale oil during the period 1909–10/1937–38.

We observe a further increase in the oil production during the last season. The output during 1937/38—3,635,010 barrels—has nearly reached the absolute maximum recorded—3,686,976 barrels in 1930–31.

Oslo, June 2. 1939.

Gunnar Jahn.

Table No. 1.—Whaling in 1937/38 and summer 1938.

Geographical areas.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrel = 1/6 ton. [1]			
South Georgia	97	1,552	40	155	43	–	1,887	90,266	2	–	12
Antarctic, others (pelagic whaling).	14,826	26,457	2,039	6	824	–	44,152	3,250,064	–	31	244
Coast of Africa:—											
Coast of Natal ..	39	536	175	64	425	–	1,239	54,352	[2] 1	–	16
South of Madagascar	1	2	1,752	2	48	–	1,805	84,750	–	1	6
Atlantic and Arctic:											
Portugal (Azores)	–	–	–	–	–	[3] 388	[4] 388	7,284	–	–	–
Coast of Norway	4	261	–	94	9	[5] 27	395	11,076	4	–	12
Faroe Islands ...	2	94	–	5	5	–	106	3,254	1	–	3
Iceland	9	113	–	5	20	–	147	4,920	1	–	3
Coast of West Greenland.....	–	7	1	–	–	–	8	–	–	–	1
Pacific (north):—											
Alaska.....	33	65	12	–	63	–	173	9,734	1	–	5
British Columbia	4	50	4	–	252	–	310	13,157	2	–	6
Coast of Peru	–	–	–	–	602	–	602	12,869	–	1	8
Coast of Chile.....	15	56	6	44	165	[7] 14	300	8,279	[6] –	[6] –	[6] –
Coast of Kamtchatka	–	104	43	–	64	[8] 54	265	9,102	–	1	3
Coast of Japan and Corea.....	4	293	60	553	785	[9] 275	1,970	33,353	21	–	25
Coast of West Australia.....	–	–	917	–	–	–	917	42,550	–	1	6
Total	15,034	29,590	5,049	928	3,305	758	54,664	3,635,010	33	35	350

[1]) 1 ton = 1,016 kg. [2]) There are in reality two shore stations, but these are operated as one station and catch figures are given in one schedule. [3]) No specification. [4]) Probably a small number of whales has also been caught from the island of São Miguel and perhaps also from some others of the islands of Azores, but no information is available. [5]) Different kinds of small whales. [6]) No information as to the material. See also Introduction page 11. [7]) Right-whales. [8]) Grey-whales. [9]) 2 right-whales and different kinds of small whales.

Table No. 2.—British whaling in 1937/38 and summer 1938.

Geographical areas.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrel = 1/6 ton.			
South Georgia.....	44	681	22	65	13	–	825	38,500	1	–	6
Antarctic, pelagic..	4,766	9,417	838	–	265	–	15,286	1,114,865	–	10	83
Coast of Natal	39	536	175	64	425	–	1,239	54,352	[1] 1	–	16
South of Madagascar	1	2	1,752	2	48	–	1,805	84,750	–	1	6
British Columbia ..	4	50	4	–	252	–	310	13,157	2	–	6
Total	4,854	10,686	2,791	131	1,003	–	19,465	1,305,624	4	11	117

[1]) There are in reality two shore stations, but these are operated as one station and catch figures are given in one schedule.

Table No. 3.—Norwegian whaling in 1937/38 and summer 1938.

Geographical areas.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrel = 1/6 ton.			
Antarctic, pelagic..	4,985	9,083	413	1	478	–	14,960	1,157,993	–	11	8
Coast of Norway ..	4	261	–	94	9	[1]) 27	395	11,076	4	–	1
Total	4,989	9,344	413	95	487	27	15,355	1,169,069	4	11	9

[1]) Different kinds of small whales.

Table No. 4.—Japanese whaling in 1937/38 and summer 1938.

Geographical areas.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrel = 1/6 ton.			
Antarctic, pelagic..	2,397	2,709	475	–	1	–	5,582	388,683	–	4	3
Coast of Japan and Corea	4	293	60	553	785	[1]) 275	1,970	33,353	21	–	2
Total	2,401	3,002	535	553	786	275	7,552	422,036	21	4	5

[1]) 2 right-whales and different kinds of small whales.

Table No. 5.—German whaling in 1937/38 and summer 1938.

Geographical areas.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrel = 1/6 ton.			
Antarctic, pelagic..	1,711	3,282	172	5	67	–	5,237	356,858	–	4	3
Coast of Peru	–	–	–	–	602	–	602	12,869	–	1	
Total	1,711	3,282	172	5	669	–	5,839	369,727	–	5	3

Table No. 6.—United States' whaling in 1937/38 and summer 1938.

Geographical areas.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrel = 1/6 ton.			
Antarctic, pelagic..	555	955	47	–	3	–	1,560	114,015	–	1	9
Coast of West Australia.....	–	–	917	–	–	–	917	42,550	–	1	6
Alaska	33	65	12	–	63	–	173	9,734	1	–	5
Total	588	1,020	976	–	66	–	2,650	166,299	1	2	20

Table No. 7.—Whaling results for the various countries in 1937/38 and summer 1938.

Countries.	Species of whales caught.							Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.
								Barrel = 1/6 ton.			
British Empire	4,854	10,686	2,791	131	1,003	–	19,465	1,305,624	4	11	117
Norway.....	4,989	9,344	413	95	487	[1]) 27	15,355	1,169,069	4	11	95
Japan	2,401	3,002	535	553	786	[2]) 275	7,552	422,036	21	4	55
Germany	1,711	3,282	172	5	669	–	5,839	369,727	–	5	38
United States	588	1,020	976	–	66	–	2,650	166,299	1	2	20
Panama.....	412	1,011	94	–	10	–	1,527	117,650	–	1	9
Argentine.....	53	871	18	90	30	–	1,062	51,766	1	–	6
Sovjet Russia	–	104	43	–	64	[3]) 54	265	9,102	–	1	3
Chile	15	56	6	44	165	[4]) 14	300	8,279	[5]) –	[5]) –	[5]) –
Portugal.....	–	–	–	–	–	[6]) 388	[7]) 388	7,284	–	–	–
Iceland	9	113	–	5	20	–	147	4,920	1	–	3
Denmark	2	101	1	5	5	–	114	3,254	1	–	4
Total	15,034	29,590	5,049	928	3,305	758	54,664	3,635,010	33	35	350

[1]) Different kinds of small whales. [2]) Right-whales and different kinds of small whales. [3]) Grey-whales. [4]) Right-whales. [5]) No information as to the material. See also Introduction page 11. [6]) No specification. [7]) Probably a small number of whales has also been caught from the island of São Miguel and perhaps also from some others of the islands of Azores, but no information is available.

Table No. 8.—Average size of whales caught in the summer-season 1938.

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
A. Blue-whales.				
Coast of Africa:—				
Coast of Natal	No. 1	64.84	69.05	67.00
Males 19 } Total 39.				
Females 20 }				
Atlantic and Arctic:—				
Summary Coast of Norway...		72.50	69.00	70.75
Males 2 } Total 4.				
Females 2 }				
Iceland	No. 1	70.60	76.00	73.00
Males 5 } Total 9.				
Females 4 }				
Atlantic and Arctic, total		71.73	71.75	71.73
Males 11 } Total 15.				
Females 4 }				

Table No. 8 (continued).

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
A. Blue-whales (cont.).		Engl. feet.	Engl. feet.	Engl. feet.
Pacific (north):—				
Alaska	No. 1	74.58	76.29	75.30
Males 19 } Total 33. Females 14 }				
British Columbia	No. 1	71.76	80.00	73.75
Males 3 } Total 4. Females 1 }				
B. Fin-whales.				
Coast of Africa:—				
Coast of Natal	No. 1	60.15	60.14	60.14
Males 287 } Total 536. Females 249 }				
Atlantic and Arctic:—				
Coast of Norway	No. 1	67.13	69.57	68.05
Males 138 } Total 261. Females 123 }	„ 2	62.85	64.94	63.75
	„ 3	58.90	64.20	62.08
	„ 4	59.53	62.19	61.08
Average		63.09	65.15	64.07
Faroe Islands	No. 1	56.60	60.64	58.16
Males 57 } Total 93. Females 36 }				
Iceland	No. 1	60.36	61.33	60.86
Males 55 } Total 113. Females 58 }				
Greenland.....	No. 1	59.75	59.67	59.71
Males 4 } Total 7. Females 3 }				
Total Atlantic and Arctic		60.99	63.33	62.08
Males 254 } Total 474. Females 220 }				
Pacific (north):—				
Alaska	No. 1	58.64	60.83	59.62
Males 36 } Total 65. Females 29 }				
British Columbia	No. 1	57.90	59.40	58.40
Males 30 } Total 50. Females 20 }	„ 2	56.85	58.53	57.57
Average		57.20	58.75	57.82

Table No. 8 (continued).

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
C. Humpbacks.				
Coast of Africa:—				
Coast of Natal ..... Males 87 } Total 175. Females 88 }	No. 1	36.46	36.35	36.41
Pacific (north):—				
Alaska ..... Males 5 } Total 12. Females 7 }	No. 1	37.20	38.86	38.17
British Columbia, total..... Males 2 } Total 4. Females 2 }		33.50	37.50	35.50
Coast of West Australia ..... Males 517 } Total 917. Females 400 }	No. 1	38.74	40.17	39.37
D. Sperm-whales.				
Coast of Africa:—				
Coast of Natal ..... Males 347 } Total 425. Females 78 }	No. 1	44.05	33.51	42.12
Atlantic and Arctic:—				
Coast of Norway ..... Males 9.		55.89		55.89
Faroe Islands ..... Males 5.		50.00		50.00
Iceland ..... Males 20.		52.70		52.70
Atlantic and Arctic, total .... Males 34.		53.15		53.15
Pacific (north):—				
Alaska ..... Males 63.	No. 1	49.19		49.19
British Columbia ..... Males 252.	No. 1	46.57		46.57
	„ 2	46.30		46.30
Average		46.44		46.44

Table No. 9.—Whales caught in the summer-season 1938, by species, sex and size.

1. Coast of Norway.

Fin-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
43	1	1	2	67	3	9	12
47	–	1	1	68	10	5	15
50	2	3	5	69	14	11	25
51	2	1	3	70	6	11	17
52	2	–	2	71	2	7	9
53	–	–	–	72	–	5	5
54	1	–	1	73	–	7	7
55	5	3	8	74	–	–	–
56	2	1	3	75	–	1	1
57	2	4	6	76	–	3	3
58	3	5	8				
59	5	1	6	Sum	138	123	261
60	10	9	19				
61	6	3	9	Average size	Males: 63.09 feet		
62	12	3	15		Females: 65.15 „		
63	15	5	20		Total animals: 64.07 „		
64	14	8	22	Per cent	Males: 52.87		
65	12	10	22		Females: 47.13		
66	9	6	15				

Sei-whales.

30	2	–	2	47	3	4	7
35	1	–	1	48	3	6	9
36	3	–	3	49	–	2	2
37	–	1	1	50	1	1	2
38	–	2	2				
39	1	–	1	Sum	48	46	94
40	2	6	8				
41	1	3	4	Average size	Males: 43.21 feet		
42	4	6	10		Females: 44.04 „		
43	5	2	7		Total animals: 43.62 „		
44	4	3	7	Per cent	Males: 51.06		
45	11	4	15		Females: 48.94		
46	7	6	13				

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
50	1	57	2
52	1	63	1
56	4		
		Sum	9

Average size:— Males: 55.89 feet.

Table No. 9 (continued).

2. Faroe Islands.

Fin-whales.

Engl. feet.	Number of males.	Number of females.	Total animals.	Engl. feet.	Number of males.	Number of females.	Total animals
42	–	1	1	63	1	–	1
45	–	1	1	64	–	6	6
46	3	–	3	65	2	1	3
47	–	–	–	66	2	3	5
48	1	–	1	67	–	1	1
49	1	1	2	68	–	2	2
50	2	–	2	69	–	–	–
51	2	–	2	70	–	2	2
52	–	–	–	71	–	1	1
53	3	1	4				
54	5	1	6	Sum	57	36	93
55	6	1	7				
56	6	4	10				
57	1	–	1	Average size	Males: 56.60 feet		
58	2	2	4		Females: 60.64 „		
59	6	1	7		Total animals: 58.16 „		
60	13	4	17	Per cent	Males: 61.29		
61	–	1	1		Females: 38.71		
62	1	2	3				

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Males.
45	1	51	1
49	1	55	1
50	1		
		Sum	5

Average size:— Males: 50 feet

3. Iceland.

Fin-whales.

Engl. feet.	Number of males.	Number of females.	Total animals.	Engl. feet.	Number of males.	Number of females.	Total animals.
40	1	–	1	64	3	5	8
47	–	2	2	65	3	2	5
50	1	2	3	66	–	–	–
51	–	1	1	67	3	5	8
52	–	–	–	68	1	4	5
53	–	1	1	69	–	3	3
54	1	2	3	70	–	2	2
55	1	–	1				
56	4	3	7	Sum	55	58	113
57	4	6	10				
58	3	1	4	Average size	Males: 60.36 feet		
59	4	–	4		Females: 61.33 „		
60	8	2	10		Total animals: 60.86 „		
61	3	4	7	Per cent	Males: 48.67		
62	5	4	9		Females: 51.33		
63	10	9	19				

Table No. 9 (continued).

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
46	1	57	2
47	2	58	3
49	2	59	1
50	5		
51	1	Sum	20
56	3		

Average size:— Males: 52.70 feet.

4. Alaska.

Blue-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
68	–	1	1	80	–	1	1
69	1	1	2	81	–	1	1
70	–	1	1	82	–	–	–
71	1	–	1	83	–	1	1
72	1	–	1	Sum	19	14	33
73	3	–	3				
74	3	1	4	Average size { Males: 74.58 feet; Females: 76.29 „; Total animals: 75.30 „			
75	2	–	2				
76	5	2	7				
77	1	1	2				
78	1	2	3	Per cent { Males: 57.58; Females: 42.42			
79	1	2	3				

Fin-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
50	1	1	2	65	–	2	2
51	1	1	2	66	–	–	–
52	2	1	3	67	–	2	2
53	1	1	2	68	–	1	1
54	1	1	2	69	–	1	1
55	1	–	1				
56	3	–	3	Sum	36	29	65
57	3	3	6				
58	2	1	3				
59	3	1	4	Average size { Males: 58.64 feet; Females: 60.83 „; Total animals: 59.62 „			
60	5	1	6				
61	4	2	6				
62	1	–	1				
63	6	7	13	Per cent { Males: 55.38; Females: 44.62			
64	2	3	5				

Table No. 9 (continued).

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
39	2	51	2
40	1	52	4
41	2	53	1
42	1	54	5
43	1	55	3
44	3	56	2
45	4	57	4
46	5	58	–
47	5	67	1
48	7		
49	4	Sum	63
50	6		

Average size:— Males: 49.19 feet.

5. British Columbia.

Fin-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
48	–	1	1	62	2	2	4
49	–	–	–	63	–	1	1
50	1	–	1	64	–	3	3
51	–	–	–	65	1	–	1
52	–	1	1	66	1	1	2
53	–	–	–				
54	2	–	2	Sum	30	20	50
55	10	3	13				
56	2	2	4	Average size	Males:		57.20 feet
57	5	1	6		Females:		58.75 „
58	2	2	4		Total animals:		57.82 „
59	1	–	1	Per cent	Males:	60.00	
60	2	3	5		Females:	40.00	
61	1	–	1				

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
37	1	49	15
40	11	50	23
41	8	51	11
42	18	52	9
43	23	53	7
44	23	54	2
45	25	55	3
46	21	56	3
47	27		
48	22	Sum	252

Average size:— Males: 46.44 feet.

Table No. 10.—Average production of oil per "blue-whale equivalent" in the summer-season 1938.

Other whales are reduced to blue-whale equivalents on the following basis:— 1 blue-whale = 2 fin-whales = 2½ humpbacks = 6 sei-whales.

Geographical areas.	Company.	Blue-whale equivalents.	Oil production.	
			Total.	Per blue-whale equivalent.
			Barrels.[1])	Barrels.[1])
Coast of Africa:—				
Coast of Natal	No. 1	387.7	38,729	99.9
South of Madagascar	No. 1	703.1	83,540	118.8
Atlantic and Arctic:—				
Coast of Norway	No. 1	33.5	2,487	74.2
	„ 2	35.0	2,581	73.7
	„ 3	61.7	4,183	67.8
	„ 4	20.0	1,257	62.9
Iceland	„ 1	66.3	3,872	58.4
Faroe Islands.....	„ 1	49.8	3,003	60.3
Average		—	—	65.3
Pacific (north):—				
Alaska.....	No. 1	70.3	6,096	86.7
British Columbia	No. 1	11.9	719	60.4
	„ 2	18.7	916	49.0
Average		—	—	53.4
Coast of West Australia	No. 1	366.8	42,550	116.0

[1]) Barrel = 1/6 ton. (1 ton = 1,016 kg.).

Table No. 11.—Average production of oil per sperm-whale in the summer-season 1938.

Geographical areas.	Company.	Number of sperm-whales	Oil production	
			Total	Per sperm-whale
			Barrels	Barrels
Coast of Africa:—				
Coast of Natal	No. 1	425	15,623	36.8
Atlantic and Arctic:—				
Coast of Norway	No. 1	1	99	99.0
	„ 2	3	190	63.3
	„ 3	1	62	62.0
	„ 4	4	217	54.3
Iceland	„ 1	20	1,048	52.4
Faroe Islands.....	„ 1	5	251	50.2
Average		–	–	54.9
Pacific (north):—				
Alaska.....	No. 1	63	3,638	57.7
British Columbia	No. 1	135	6,477	48.0
	„ 2	117	5,045	43.1
Average		–	–	45.7
Coast of Peru.....	No. 1	602	12,869	21.4

Table No. 12.—Whale-foetuses.

1. Fin-whale foetuses

measured in the summer-season 1938.

Geographical areas.	Date when measured.	Length. Mother.	Length. Foetus.	Sex.	Geographical areas.	Date when measured.	Length. Mother.	Length. Foetus.	Sex.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
Coast of Norway	23/6	72′	8′ 0″	F	Faroe Islands ..	24/5	70′	4′ 0″	
Average length	21/7	70′	6′ 0″		Average length	24/6	70′	9′ 0″	
of foetuses:	11/8	64′	12′ 0″	M	of foetuses:	18/8	64′	8′ 0″	
8′ 8″	16/8	69′	7′ 0″	M	8′ 11″	16/9	66′	12′ 0″	
	21/8	63′	12′ 0″	M		12/10	64′	13′ 0″	
	21/8	64′	7′ 0″			13/10	66′	7′ 6″	
	26/8	71′	9′ 0″						
	2/9	67′	8′ 0″	F					
	20/9	66′	9′ 0″		Alaska	26/6	64′	6′ 3″	M
					Average length	20/7	68′	4′ 2″	M
Iceland	30/5	58′	6′ 0″	F	of foetuses:	7/8	60′	6′ 6″	M
Average length	6/6	63′	5′ 0″	F	7′ 2″	26/8	63′	10′ 1″	F
of foetuses:	9/6	64′	3′ 0″	M		31/8	63′	8′ 8″	F
6′ 4″	10/6	63′ 6″	1′ 0″	F					
	20/6	64′	1′ 6″	M					
	30/6	62′ 6″	7′ 0″	M	British Columbia	24/4	60′	2′ 0″	M
	9/7	68′	8′ 0″	M	Average length	4/8	58′	2′ 6″	M
	15/7	70′	8′ 0″	F	of foetuses:	18/8	66′	8′ 0″	F
	10/8	63′	9′ 0″	M	4′ 11″	18/8	64′	7′ 4″	M
	22/8	63′	10′ 0″	F					
	29/8	63′	11′ 6″	M					

2. Humpback foetuses

measured in the summer-season 1938.

West of Australia	6/7	42′	15′ 8″	F		21/8	43′	11′ 8″	M
Average length	12/7	44′	10′ 0″	M		22/8	46′	13′ 9″	M
of foetuses:	25/7	41′	13′ 7″	F		23/8	44′	14′ 6″	F
13′ 10″	1/8	46′	14′ 8″	F		23/8	45′	12′ 7″	M
	4/8	44′	14′ 1″	F		23/8	38′	12′ 10	M
	6/8	41′	14′ 2″	F		26/8	43′	12′ 1″	M
	7/8	47′	14′ 5″	M		26/8	44′	15′ 6″	F
	8/8	43′	14′ 10″	M		28/8	44′	14′ 7″	F
	12/8	42′	14′ 6″	F		13/9	47′	11′ 8″	F
	13/8	46′	15′ 3″	F		19/9	45′	13′ 5″	F
	13/8	44′	13′ 5″	M					
	15/8	41′	14′ 3″	F					
	15/8	43′	13′ 10″	M	Alaska	25/8	48′	6′ 8″	F
	16/8	43′	15′ 2″	M	Average length	17/9	40′	3′ 0″	F
	17/8	45′	15′ 1″	F	of foetuses:				
	17/8	45′	14′ 2″	F	4′ 10″				

3. Sei-whale foetuses

measured in the summer-season 1938.

Geographical areas.	Date when measured.	Length. Mother.	Length. Foetus.	Sex.
		Engl. ft.	Engl. ft.	
Coast of Norway	12/5	48′	3′ 0″	
Average length	13/5	43′	3′ 0″	M
of foetuses:	28/5	46′	3′ 0″	M
3′ 6″	28/5	46′	[1])	
	23/6	47′	5′ 0″	M

[1]) Not measured.