DET NORSKE HVALRÅDS STATISTISKE PUBLIKASJONER

# INTERNATIONAL WHALING STATISTICS

# IX

EDITED BY

THE COMMITTEE FOR WHALING STATISTICS APPOINTED BY THE NORWEGIAN GOVERNMENT

>000

OSLO 1937

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# PREFACE

The Committee published separate figures for the whaling in the Antarctic for the season 1935/36 in "International Whaling Statistics VIII". In the present publication, International Whaling Statistics IX, we present the statistics for the whaling in other areas in 1936. Volume IX thus gives a review of the whaling in conformity with the volumes I-VII of the International Whaling Statistics.

Oslo, June 22, 1937.

Gunnar Jahn.

Johan Hjort.

Harald B. Paulsen.

## INTRODUCTION

The number of whales killed in all areas was in the last season 44,782, the largest number ever recorded. As mentioned in No. VIII of International Whaling Statistics, the number of whales killed in the Antarctic in the season 1935/36 was lower than in 1934/35. Consequently, more whales have been killed in the areas outside the Antarctic in 1936 than in 1935. In table a. are given the figures of whales killed in all areas in the seasons 1919/20-1935/36.

Years.	All areas.	Antarctic.	Arctic.	Africa.	Pacific, north.	Japan.	Kamt- chatka	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	1,101	_	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

Table a.—Whales caught in the different areas.

From this table we learn that the areas outside the Antarctic were of great importance up to 1928/29. In table b. we have given the percentage of whales killed in the Antarctic and in other areas from the season 1928/29.

		Anta	retic.	Other areas.			
Years.	All 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		
934–35	39,254	31,808	81.0	7,446	19.0		
1935–36	44,782	30,991	69.2	13,791	30.8		

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

This table shows that the percentage in 1935/36 of the whaling outside the Antarctic was larger than in the former years here recorded. The importance of this whaling is, as a source of oil production, less than indicated by the percentage of whales killed. This is shown in the following table c., where the oil production in the Antarctic and in other areas is compared.

	All aroog	Anta	rctic.	Other areas.			
Years.	All 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		

Table c.—Oil production 1928/29-1935/36.

<sup>1</sup>) Barrel =  $\frac{1}{6}$  ton (1 ton = 1,016 kg.).

From these two tables we learn that in 1935/36 30.8 per cent of all whales were killed outside the Antarctic, whereas only 15.1 per cent of the oil production was due to the catch in these areas. The oil production per whale is thus smaller in the areas outside the Antarctic. 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. We also emphasize that many of the whales killed in the areas outside the Antarctic are not only used for oil production.

In the total oil production in 1935/36-2,871,117 barrels—sperm-oil is included. The total production of oil and of sperm-oil separately on the different grounds is given in table d.

Grounds.	Total oil production.	Of which sperm-oil.		Total oil production.	Of which sperm-oil.
2	Barrels.	Barrels.		Barrels.	Barrels.
Sum Antarctic 1935/36.	2,436,338	23,755	Atlantic and Arctic:		
Sum outside Antarctic			Portugal (Azores)		-
$1936\ldots\ldots$	434,779	138,204		7,997	
Total	2,871,117	161,959	Faroe Islands	2,972	
of which	2,011,111	101,000	Iceland	3,415	257
Norwegian production	1,162,742	19,741	Coast of West Greenland		-
British production			New Foundland	7,186	914
Prod. of other countries			Pacific (north):		
		-,	Alaska	17,325	
South Georgia	143,185	126		16,969	
Antarctic, others,			California	2,602	
(pelagic whaling)	2,293,153	23,629	Coast of Peru	61,853	
Coast of Africa:—			Coast of Chile	8,789	
Coast of Natal	64,570		Coast of Kamtchatka	18,238	5,421
Cape Colony			Japan and Corea	30,144	
Coast of Congo	38,712	1,367	Coast of West Australia.	122,208	550

**Table d.**—Oil production in 1935/36 and summer-season 1936.

The production of sperm-oil is of considerable importance in the areas outside the Antarctic. Of the total production of oil in those areas—434,779 barrels—138,204 barrels were sperm-oil.

Whaling outside the Antarctic has in 1936 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 and West Australia.

The whaling in the North Atlantic and Arctic is not of very great importance. In 1936 there were killed 705 whales—137 more than in 1935. Table e. gives the catch distributed by species and grounds for the years 1931–1936.

Table e.—North Atlantic and Arctic.

d												
			Sp		f whale	s caug	ht.		011	E	xpedition	s.
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
27 .7 4.7									Barrels.			
North Atlantic and Arctic. Total	$1931 \\1932 \\1933 \\1934 \\1935 \\1936$	54 62 59 25 10 31	541 658 854 357 385 445	$43 \\ 14 \\ 9 \\ 5 \\ 17 \\ 15$	$\begin{array}{r} 60 \\ 83 \\ 29 \\ 185 \\ 125 \\ 158 \end{array}$	$5 \\ 53 \\ 11 \\ 25 \\ 47$	$^{2}) \frac{4}{-}$ $^{1}) \frac{6}{1} 9$	$703 \\ 827 \\ 1,004 \\ 583 \\ 568 \\ 705$	28,590 34,833 16,038 15,341	2 3 3 7 8	$2 \\ 2 \\ 3 \\ 1 \\ - \\ -$	14 17 19 13 17 20
Faroe Islands.	1933 1934 1935 1936	6 2 3 2	91 74 75 65	- 2 -	$7 \\ 13 \\ 3 \\ 1$	3 7 5 9		107 96 88 77	$3,243 \\ 3,013 \\ 2,997 \\ 2,972$	1 1 1 1	 	2 2 2 3
Iceland.	$^{1935}_{1936}$	${f 2}{5}$	$\frac{25}{72}$	-	1 1	7	-	28 85	$691 \\ 3,415$	1 1	-	$2 \\ 2$
Coast of Norway.	$\begin{array}{c} 1931 \\ 1932 \\ 1933 \\ 1934 \\ 1935 \\ 1936 \end{array}$	$223 \\ 7 \\ -1 \\ 4$	69 190 197 132 106 147	- 1 - - -	$52 \\ 59 \\ 22 \\ 172 \\ 108 \\ 154$	$5 \\ 6 \\ 9 \\ 4 \\ 4 \\ 17$	- - - 1) 6 1) 9	$\begin{array}{ c c c } 128 \\ 279 \\ 236 \\ 308 \\ 225 \\ 331 \end{array}$	3,399 8,431 6,585 6,305 4,488 7,997		- - - -	$     \begin{array}{c}       6 \\       9 \\       6 \\       6 \\       10 \\       12     \end{array} $
Pelagic whaling in Arctic.	1931 1932 1933 1934	$52 \\ 38 \\ 43 \\ 21$	$456 \\ 443 \\ 549 \\ 128$	39 9 7 3	8 24 - -	- 41 -	<sup>2</sup> ) <sup>4</sup> - -	555 518 640 152	20,159		2 2 3 1	7 7 10 4
Coast of West Greenland.	$1931 \\1932 \\1933 \\1934 \\1935 \\1936$	- 1 3 2 - -	$16 \\ 25 \\ 17 \\ 23 \\ 23 \\ 15$	$     \begin{array}{c}       4 \\       4 \\       1 \\       2 \\       6 \\       5     \end{array} $				20 30 21 27 29 20			   	1 1 1 - -
New Foundland.	$\begin{array}{c} 1935\\ 1936 \end{array}$	4 20	$\begin{array}{c} 156\\ 146 \end{array}$	9 10	13 2	16 14	_	198 192			-	3 3

<sup>1</sup>) Different kinds of small whales. <sup>2</sup>) Right-whales.

According to this table whaling has been carried on in the same areas in 1936 as in 1935. The table shows a rise in the number of whales killed off Iceland and off the coast of Norway. The number of whales killed has declined for the Faroe Islands and for the coast of West Greenland and New Foundland. No pelagic whaling has been carried on in the Arctic in 1935 and 1936. The principal species killed on these grounds are fin-whales, 445 of 705 whales killed. Then come 158 sei-whales. Of sperm-whales there were killed 47, of blue-whales 31 and of humpbacks 15.

The figures for the African whaling from 1931 are given in table f. by species and hunting grounds.

			Sp	ecies of	f whale	es caug	ht.			E	xpedition	s.
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
			(						Barrels			
Africa. Total.	1931	122	466	71	29	135	-	823		1	-	10
	1932	109	345		23		<sup>1</sup> ) 1	1,043			-	8
	1933	85	602	162	11		<sup>1</sup> ) 2	1,168			-	14
	1934	71		1,238	57		<sup>1</sup> ) 2	2,392		3	-	21
	1935	122		1,659	100		<sup>1</sup> ) 2		117,950		3	27
	1936	120	1,095	1,168	305	1,073	<sup>2</sup> ) 7	3,768	135,081	3	3	43
Coast of Natal.	1931	122	466	71	29	135	_	823	37,086	1	_	10
<b>,</b>	1932	109	345	309	23		<sup>1</sup> ) 1	1,043			-	8
	1933	85	602	162	11	306	<sup>1</sup> ) 2	1,168	53,000	2	-	14
	1934	70	536	514	30	422	<sup>1</sup> ) 2	1,574	60,924	2	-	17
	1935	122	526	418	90	595	<sup>1</sup> ) 2	1,753	67,008	2	-	17
	1936	41	528	301	68	911	-	1,849	64,570	2	-	18
Cape Colony.	1936	79	566	27	214	108	²) 7	1,001	31,799	1	-	14
Coast of Congo.	1934	1	21	724	27	45	_	818	21,435	1	-	4
	1935		_	1,241	10		-	1,251			3	10
	1936	-	1	840	23	54	-	918			3	11

Table f.—Africa.

<sup>1</sup>) Right-whales. <sup>2</sup>) Bryde-whales.

The number of whales killed off Africa has gone up in the last six seasons. The African whaling was in 1931–33 only carried on off the coast of Natal, in the years 1934–36 off the coast of Natal and of Congo and in 1936 also off the coast of the Cape Colony. The rise in the number of whales killed in the last season is principally due to the catch off the coast of the Cape Colony. The catch off the coast of Natal has gone up in 1936, while the catch off the coast of Congo has declined. The principal species of whales killed off Africa in 1936 are humpbacks—1,168—, fin-whales—1,095—and sperm-whales—1,073. Of sei-whales there were killed 305, of blue-whales 120 and of Bryde-whales 7.

In the Pacific North there were killed 857 whales in 1936, practically the same number as in 1935. The specification of the whales killed by species and hunting grounds is given in table g.

			$\mathbf{s}_{\mathbf{f}}$	oecies o	f wha	les caug	ht.			0.1	E	xpedition	s.
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.		Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
										Barrels.			
Pacific North.	1933	1	17	1	-	190	1) 3	382	591	24,080	2	1	9
Total.	1934	_	-	-	-				1,019			1	15
	1935	140	117	148	6	253		191	855			$\begin{array}{c} 2\\ 1\end{array}$	16
	1936	44	208	132	-	377	<sup>1</sup> )	96	857	36,896	• 4	1	15
Alaska.	1933		_	_	_	_	1) ]	182	182	6.420	1	_	3
	1934	_	_	_	_	-		$16\overline{4}$	464			_	7
	1935	87	94	141	_	70		2	394		$egin{array}{c} 2 \\ 2 \\ 2 \end{array}$	-	7
	1936	41	160	118	-	66	,	-	385		<b>2</b>	-	7
British Columbia.	1933	1	17	1		190			200	11,500	1	_	4
Dittion Columbua.	1934	1	11	1	_		1) 3	350	$\frac{200}{350}$	18,300	$\dot{2}$	~	$\hat{6}$
	1935	6	20	1	_	175	, .	_	202	10,334	ī	~	4
	1936	6 3	$\frac{20}{48}$	14	_	311		-	$\overline{376}$	16,969		-	$\hat{6}$
California.	1933						เงิด	200	200	6,160		1	2
California.	$1933 \\ 1934$	-	_	-				205	$\frac{200}{205}$	6,200	_	1	
	$1934 \\ 1935$		-	-	_	_		189	$\frac{205}{189}$	5,144	_	1	2
	1936		_	_	_	_		96	189 96	2,602	_	1 1	$egin{array}{c} 2 \\ 2 \\ 2 \end{array}$
Coast of Mexico.	1935	47	3	6	6	8	•	_	70	3,821	-	1	3

Table g.-Pacific North.

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

In the last year the whaling has been carried on off Alaska, British Columbia and California. The principal species killed are sperm-whales—377—, fin-whales—208— and humpbacks—132. Of blue-whales there were killed 44. The catch off California—96 whales—is not specified by species.

In the last three seasons more and more whales have been killed off the coast of Japan and Corea. The whaling by species of whales killed is given in table h.

Table h.—Japan.

			Sp	ecies of	whale	s caug	ht.			Expeditions.				
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.		
	Í							[	Barrels.		1			
Japan and Corea.	1931	20	337	70	418	283	1) 19	1,147	16,274	-		20		
	1932	17	270	90	370	<b>268</b>	<sup>2</sup> ) 21	1,036	20,230	-	-	20		
	1933	10	299	89	388	331	<sup>3</sup> ) 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			1,787			·	21		
	1936	3	241	72	348	549	4)627	1,840	30,144	17	-	23		

<sup>1</sup>) 11 grey-whales and 8 right-whales. <sup>2</sup>) 7 grey-whales and 14 right-whales. <sup>3</sup>) 2 grey-whales and 3 right-whales. <sup>4</sup>) No specification.

The principal species killed are sperm-whales—549—, sei-whales—348 and fin-whales—241. There have been killed 72 humpbacks and 3 bluewhales. We have got no specification for 627 whales.

In the last years whaling has been carried on off Kamtchatka. In 1936 there were killed 501 whales, the specification of which is given in table i.

			Species	of whale	es caught			Expeditions.			
Years	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
1000								Barrels.		-	
1933	-	-			-	<sup>1</sup> )203	203	6,705	-	1	3
1934	<b>2</b>	150	51	1	74	<sup>2</sup> ) 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
	_					,200					

Table i.--Kamtchatka.

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.

The principal species killed in 1936 were fin-whales—210—, sperm-whales—113—and grey-whales—102. Of humpbacks there were killed 68, of blue-whales 5 and for 3 whales there is no specification.

In the last 4 years whaling on a small scale has been carried on off the Azores, the particulars of which are given in table j.

			Species	of whale	es caught				Expeditions.			
Years	Blue.	Fin.	Hump- back	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	
							1	Barrels.				
1933	-		-	-	77	<sup>1</sup> )176	253	-	_		<sup>2</sup> )-	
1934	-		-		82	<sup>1</sup> )158	240	-		-	<sup>2</sup> )-	
1935	<u>-</u>				136	<sup>3</sup> )140	276	-		-	<sup>2</sup> )-	
1936	-		-	_	172	³)308	4)480	-	-	·	<sup>2</sup> )-	
1936	-			-	172	³)308	*)480	-	_	-	2)	

Table j.—Portugal (Azores).

<sup>1</sup>) Different kinds of small whales. <sup>2</sup>) Whaling is carried on with row-boats on old lines. <sup>3</sup>) No specification. <sup>4</sup>) The whales have been caught during the period <sup>1</sup>/<sub>9</sub> 1935—<sup>31</sup>/<sub>12</sub> 1936.

There is a considerable rise in the number of whales killed off the coast of Chile and Peru. A specification of the catch is given in table k.

		Species of	of whale	es caught				E	xpeditio	ns.
Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
100	904			150	1) 000	0.91	Barrels.	, , , , , , , , , , , , , , , , , , ,	T	10
	294	22	_					1	1	4
_	-		_					i	_	4
-		_		_				ī	-	4
40	71	29	85	173	2) 71	469	16.633	3	1	5
174	235	18	10	2,109	3) 1	2,547	70,642	2	$\tilde{2}$	19
	199 - - - 40	199 294 	Blue.         Fin.         Hump-back.           199         294         22           -         -         -           40         71         29	Blue.         Fin.         Humpback.         Sei.           199         294         22         -           -         -         -         -           -         -         -         -           40         71         29         85	Blue.         Fin.         Hump- back.         Sei.         Sperm.           199         294         22         -         156           -         -         -         -         -           -         -         -         -         -           40         71         29         85         173	Blue.     Fin.     back.     Sei.     Sperm.     Others.       199     294     22     -     156     1) 260       -     -     -     -     1)ca. 300       -     -     -     -     1)ca. 330       -     -     -     -     1)ca. 330       -     -     -     -     1)ca. 350       40     71     29     85     173     2)	Blue.         Fin.         Hump- back.         Sei.         Sperm.         Others.         Total of whales.           199         294         22         -         156         1)         260         931           -         -         -         -         1/(ca. 300)         ca. 300         ca. 300           -         -         -         -         -         1/(ca. 330)         ca. 330           -         -         -         -         -         1/(ca. 250)         ca. 250           40         71         29         85         173         2)         71         469	Blue.         Fin.         Hump- back.         Sei.         Sperm.         Others.         Total of whales.         Oil production.           199         294         22         -         156         1) 260         931         36,920           -         -         -         -         1)ca. 300         ca. 300         14,019           -         -         -         -         1)ca. 250         ca. 250         18,234           -         -         -         -         1)ca. 250         ca. 250         12,364           40         71         29         85         173         2)         71         469         16,633	Blue.         Fin.         Hump- back.         Sei.         Sperm.         Others.         Total of whales.         Oil production.         Shore sta- tions.           199         294         22         -         156         1)         260         931         36,920         1           -         -         -         -         -         1)ca. 300         ca. 300         14,019         1           -         -         -         -         1)ca. 250         ca. 250         12,364         1           40         71         29         85         173         2)         71         469         16,633         3	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

Table k.—Coast of Chile and Peru.

1) No specification. 2) Different kinds of small whales and 36 right-whales. 3) Right-whale.

The rise in the catch is caused by the whaling off Peru, which has been carried on by 2 floating factories with 16 catchers. The principal catch on these grounds has in the last season been sperm-whales -2,109 of the total of 2,547.

The whaling off the coast of West Australia was carried on in the years 1925—1928, but no whaling took place in the years 1929—1935. In 1936 2 companies with 2 floating factories and 12 catchers carried on whaling on these grounds. The result of the whaling by the species of whales is given in table 1. The total of whales killed were 3,093, almost exclusively humpbacks.

			Species	of whale	es caught	•			Expeditions.			
Years	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	
							1	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	
									[			

Table 1.—Coast of West Australia.

A survey of the whales killed classified by sex in some of the areas outside the Antarctic is given in table m.

		i whatee				
Kind of w	hale and whaling grounds.	1936.	1935.	1934.	1933.	1932.
	Blue-whales.					
_	Males Females	$\begin{array}{c c} 34\\ 45 \end{array}$	59 63	$\begin{array}{c} 30 \\ 40 \end{array}$	$\begin{array}{c} 35\\50 \end{array}$	53 56
Coast of Africa	Total animals Males per 100 females	79 76	122 94	$\frac{70}{75}$	85 70	109 95
	Fin-whales.				• •	
<b>a</b>	Males	293 273	297 229	306 230	$\begin{array}{c} 354 \\ 248 \end{array}$	$194 \\ 151$
Coast of Africa	Total animals Males per 100 females	566 107	526 130	536 133	$\begin{array}{c} 602\\ 143\end{array}$	345 128
North Atlantic and Arctic	Males         Females         Total animals         Males per 100 females	$\begin{array}{r} 211\\ \underline{234}\\ \hline 445\\ 90 \end{array}$	$\begin{array}{r} 92\\110\\\hline 202\\84 \end{array}$	$\begin{array}{r}154\\180\\\hline\\86\end{array}$	454 375 829 121	$\begin{array}{r} 232\\ 209\\ \hline 441\\ 111\end{array}$
	Humpbacks.	00	01			
<i>a</i>	Males Females	$\begin{array}{c} 378 \\ 489 \end{array}$	935 724	-	-	
Coast of Africa	Total animals Males per 100 females	867 77	1,659 129		-	-
Coast of West	Males Females	2,138 934	-	-	-	
Australia	Total animals Males per 100 females	3,072 229	-		-	-

Table m—Sex of whales caught.

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

Kind of whale and whaling grounds.	1935-1936.	1934-1935.	1933-1934.	1932-1933.	1931-1932.	1930-1931.	1929-1930.
	Engl. feet	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.
Blue-whales.							
Coast of Africa:		07 40	07 00	07.01	00.05	05.94	c0 90
Natal Hanglip	h –	67.43	67.06	67.21	66.67	65.34	$\begin{array}{c} 69.38\\ 68.18\end{array}$
Saldanha Bay	69.04	_	_	_	_	_	66.80
Walvis Bay	<u> </u>	_		_	_	_	66.53
North Atlantic and Arctic:							00000
Pelagic whaling	-	_	75.33	74.24	73.47	75.73	73.42
Faroe Islands	-	64.00	-		-	-	-
New Foundland	70.70	-	-	-	-	-	-
Alaska	77.41		-	-	-	-	74.21
Coast of Mexico Coast of Peru	73.00	65.57	-	-	-	-	
Coast of Peru	13.00	-	-	_	-	-	_
Fin-whales.							
Coast of Africa:							
Natal	-	60.70	60.03	60.02	59.69	58.59	62.16
Hanglip	57.02	-	-	-	-	-	59.62
Saldanha Bay	J •	-	-	-	-	-	58.54
Walvis Bay North Atlantic and Arctic:	-	-		-	-	-	55.18
Pelagic whaling			61.66	62.35	63.38	62.31	60.36
Whaling from coast	60.66	59.23	59.65	59.40	03.30	02.51	60.16
Alaska and Br. Columbia.	59.23		56.44		_	-	55.93
Coast of Mexico		59.33	-	_	-	-	-
Coast of Peru	57.65	-	-	-	-	-	-
Japan and Corea	-	-	-	-	-	-	55.15
Uumnhooko							
Humpbacks. Coast of Africa:—							
Natal	· _	36.51	_		_	-	_
Cape Colony	40,59		_	_	_	-	_
Coast of Congo	39.13	36.66	_	-	-	-	-
Alaska	40.67	-	-	- 1		-	-
Coast of West Australia	38.75	-	-	-	-	-	-

Table n.—Average size of whales caught.

The distribution of the whaling by countries is given in table 5, page 15 and the following table o. gives a survey of the Norwegian whaling, the British whaling and the whaling of other countries for a series of years.

Table o. shows that the result of the whaling of other countries is more than doubled in the season 1935/36. This development of the whaling of other countries is mainly restricted to Japan, Panama and the United States. The development of the whaling of the 2 first countries has taken place in the Antarctic and that of the United States in West Australia.

	Norwegia	n whaling.	$\operatorname{British}$	whaling.	Whaling of other countries.		
Years.	Number of whales.	Oil production.	Number of whales.	Oil production.	Number of whales.	Oil production	
		Barrels. <sup>1</sup> )		Barrels.		Barrels.	
1919-20	4,590	210,659	3,378	137,448	3,401	59,220	
1920-21	6,240	278,590	3,300	141,367	2,634	51,184	
1921 - 22	6,157	332,039	4,105	196,086	3,678	111,151	
1922-23	8,738	439,401	5,675	286,265	3,707	91,648	
1923 - 24	7,180	366,963	5,759	258,079	3,900	91,204	
1924 - 25	12,460	597,040	6,835	347.538	3,958	95,830	
1925 - 26	14,727	662,641	8,735	380,107	4,731	109,788	
1926 - 27	12,754	689,425	7,248	389,087	4,173	113,410	
1927 - 28	11,791	799.361	7,079	400,192	4.654	121,790	
1928-29	14,996	1,210,235	8,230	512,611	4.670	163,236	
1929-30	21,609	1,796,221	12,204	856,797	3,861	146,024	
1930-31	25,952	2,316,962	13,019	1,131,231	3,903	238,783	
1931-32	797	28,590	9,765	803,955	2,235	83,297	
1932–33	12,644	1,317,443	12,940	1,180,526	3,084	98,809	
1933-34	13,657	1,253,694	14,564	1,190,924	3,946	128,537	
1934 - 35	16,939	1,239,327	17,476	1,288,554	4,839	163,402	
1935-36	15,670	1,162,742	19,850	1,238,688	9,262	469,687	

<sup>1</sup>) Barrel =  $\frac{1}{6}$  ton (1 ton = 1,016 kg.).

Oslo, June 22, 1937.

Gunnar Jahn.

Table o

			Species of	of whole	aought				E	rpedition	s.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}^{1}}$			
outh Georgia ntarctic, others	1,221	520	41	-	3	-	1,785	143,185	2	-	10
(pelagic whaling). oast of Africa:—	16,510	9,177	3,121	2	396	-	29,206	2,293,153		24	165
Coast of Natal	41	528	301	68	911		1,849	64,570	2	-	18
Cape Colony	79	566	27	214	108	<sup>2</sup> ) 7		31,799	1	-	14
Coast of Congo tlantic and Arctic:	-	1	840	23	54	-	918	38,712	-	3	11
Portugal (Azores)	-		-		172			-	-	-	
Coast of Norway	4	147	-	154	17	<sup>5</sup> ) 9		7,997	4		12
Faroe Islands	2	65		1	9	-	77	2,972	1	-	$3 \\ 2$
Iceland Coast of West	5	72		1	7	-	85	3,415	1	-	2
Greenland	_	15	5		_	_	20	_	-	-	_
New Foundland . acific (north):—	20	146	10	2	14	-	192	7,186	2	-	3
Alaska	41	160	118		66	_	385	17.325	2	_	7
British Columbia	3	$\frac{100}{48}$	14	-	311		376	16,969	$2 \\ 2$	-	6
California	_		-	-		<sup>3</sup> ) 96		2.602	_	1	2
oast of Peru	135	139	4	10	2,921	,	2,309	61,853		$\tilde{2}$	$1\overline{6}$
oast of Chile	39	96	14	-	88	<sup>6</sup> ) 1		7) 8,789	$\frac{-}{2}$	_	3
oastofKamtchatka	5	210	$\hat{68}$	_	113	<sup>8</sup> ) 105		18,238	_	1	3 3
oast of Japan and	Ŭ		00		110	, 200		10,200		-	-
Corea bast of West	3	241	72	348	549	³) 627	1,840	30,144	17	-	23
Australia	-	7	3,072	-	14	-	3,093	122,208	-	$^{2}$	12
$\mathbf{Total}$	18,108	12,138	7,707	823	4,853	1,153	44,782	2,871,117	36	33	310

Table No. 1.—Whaling in 1935/36 and summer 1936.

<sup>1</sup>) 1 ton = 1,016 kg. <sup>2</sup>) Bryde-whales. <sup>3</sup>) No specification. <sup>4</sup>) The whales have been caught during the eriod  $\frac{1}{9}$  1935 till  $\frac{31}{12}$  1936. <sup>5</sup>) Different kinds of small whales. <sup>6</sup>) Right-whale. <sup>7</sup>) The quantity of oil has been alculated as no information was to hand re. oil equivalent for the 88 sperm-whales. <sup>8</sup>) 102 grey-whales and 3 without pecification.

Table	No	2Norwegian	whaling	in	1035/36	and	summer	1936
laure	щυ.	2. Noiwegian	whanng		1933/30	anu	Summer	1950.

			Species of	of whales	caught				Е	xpedition	8.
Geographical areas.	Blue.	Fin.	Hump- back.	Sel.	Sperm.	,	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}}$			
Intarctic, pelagic Joast of Congo Joast of Norway	7,349 - 4	4,873 1 147	1,908 840 -	2 23 154	$289 \\ 54 \\ 17$	-	010	1,116,0 <b>3</b> 3 38,712 7,997		13 3 -	82 11 12
$\mathbf{Total}$	7,353	5,021	2,748	179	360	9	15,670	1,162,742	4	16	105

<sup>1</sup>) Different kinds of small whales.

· · · · · · · · · · · · · · · · · · ·			Species of	of whales	a canght.				Е	xpedition	ls.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch ers.
					Í			$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}} =$			
South Georgia	561	259	19	_	2	-	841	67,993	1	_	
Antarctic, pelagic	6,959	3,550	1,131	_	57		11,697	927,174		8	6
Coast of Natal	41	528	301	68	911		1,849	64,570	<b>2</b>		1
Cape Colony	79	566	27	214	108	<sup>1</sup> ) 7	1,001	31,799	1		1
New Foundland	20	146	10	<b>2</b>	14	·	192	7,186	$^{2}$	-	:
British Columbia	3	48	14	-	311	-	376	16,969	<b>2</b>		
Coast of Peru Coast of West	135	139	4	10	2,021		2,309	61,853	-	2	1
Australia	, a.,	7	1,568	-	10		1,585	61,144	_	1	
$\mathbf{Total}$	7,798	5,243	3,074	294	3,434	7	19,850	1,238,688	8	11	13

Table No. 3.—British whaling in 1935/36 and summer 1936.

1) Bryde-whales.

# Table No. 4.—Whaling of other countries in 1935/36 and summer 1936.

· · · · · · · · · · · · · · · · · · ·			Species (	of whales	s caught.				E	xpedition	s.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}} =$			
South Georgia	660	261	22	-	1	-	944	75,192	1	-	ŧ
Antarctic, pelagic	2,202	754	82	-	50	-	3,088	249,946	-	3	20
Portugal (Azores)	-	-	-	-	172	<sup>1</sup> ) 308		-	-	-	-
Faroe Islands	2	65	-	1	9	-	77	2,972	1	-	6.9
Iceland	<b>5</b>	72	-	1	7	-	85	3,415	1	-	2
West Greenland		15	5	-	-	-	20		-	-	-
Alaska	41	160	118	-	66		385	17,325	<b>2</b>	-	7
California	-		-	-	-	<sup>1</sup> ) 96	96	2,602	-	1	2
Coast of Chile	39	96	14	, <b>-</b>	88		238		2	-	. 8
Coast of Kamtchatka	5	210	68	-	113	<sup>5</sup> ) 105	501	18,238	-	1	. 3
Coast of Japan and Corea Coast of West	3	241	72	348	549	<sup>1</sup> ) 627	1,840	30,144	17	-	23
Australia	-	-	1,504	-	4	-	1,508	61,064	-	1	
$\mathbf{Total}$	2,957	1,874	1,885	350	1,059	1,137	9,262	469,687	24	6	74

No specification. <sup>2</sup>) The whales have been caught during the period <sup>1</sup>/<sub>9</sub> 1935 till <sup>31</sup>/<sub>12</sub> 1936. <sup>3</sup>) Right-whale.
 <sup>4</sup>) The quantity of oil has been calculated as no information was to hand re. oil equivalent for the 88 sperm-whales
 <sup>5</sup>) 102 grey-whales and 3 without specification.

			Species o	f whales	caught				E		xpeditions.	
Countries.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Ot	hers.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
									$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}} =$			
Norway	7,353	5,021	2,748	179	360	1)	9	15,670	$1,\!162,\!742$	4	16	105
British Empire	7,798	5,243	3,074	294	3,434	2)	7	19,850	1,238,688	8	11	131
Argentine	660	261	22		1	ľ		944	75,192	1	-	5
Chile	39	96	14		88	3)	1	238	4) 8,789	2	-	3
Denmark	2	80	5	1	9	1 .	-	97	2,972	1	`	3
Iceland	5	72	-	1	7		-	85	3,415		-	2
Japan	459	415		348	549	5)	627	2,479	74,289	17	1	28
Panama	1,746	580	73	-	50		-	2,449	205,801	-	2	15
Portugal	-	-	-	-	172	5)	308	480		-	-	-
Sovjet Russia .	5	210		-	113	6)	105	501	18,238		1	3
United States .	41	160	1,622	-	70	5)	96	1,989	80,991	2	2	15
$\operatorname{Total}$	18,108	12,138	7,707	823	4,853	1	,153	44,782	2,871,117	36	33	310

Table No. 5.—Whaling results for the various countries in 1935/36 and summer 1936.

Different kinds of small whales.
 Bryde-whales.
 Right-whale.
 The quantity of oil has been calculated as no information was to hand re. oil equivalent for the 88 sperm-whales.
 No specification.
 No specification.

# Table No. 6.—Average size of whales caught in the summer-season 1936.

Geographical areas.			Average size.	
Number of whales measured.	Company.	Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
A. Blue-whales.				
Coast of Africa: Cape Colony Males 34 Females 45 Total 79.	No. 1	66.47	70.98	69.04
$ \begin{array}{c} \mbox{Atlantic and Arctic:} \\ \mbox{New Foundland } \dots \\ \mbox{Males } 8 \\ \mbox{Females } 12 \end{array} \right\} \mbox{Total } 20. \\ \mbox{Average} \end{array} $	No. 1 ,, 2	71.43 68.00 71.00	72.00 67.50 	71.73 67.60 70.70
$\begin{array}{c} Pacific \ (north): \\ Alaska \dots \\ Males 25 \\ Females 16 \end{array} \right\} \ {\rm Total \ 41.} \\ {\rm Average} \end{array}$	No. 1 ,, 2	81.50 75.58 77.00	75.50 79.60 78.06	78.50 76.97 77.41
$\left.\begin{array}{c} Coast \ of \ Peru \ \dots \\ Males \ 68 \\ Females \ 67 \end{array}\right\} \ {\rm Total} \ 135. \\ {\rm Average} \end{array}$	No. 1 ,, 2	72.30 71.80 72.12	73.85 73.96 73.90	73.05 72.92 73.00

Table No. 6 (continued).

Geographical areas.			Average size.	
Number of whales measured.	Company.	Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet
B. Fin-whales. Coast of Africa: Cape Colony Males 293 Females 273 Total 566.	No. 1	56.34	57.76	57.02
Atlantic and Arctic:         Coast of Norway         Males       68         Females       79         Average	No. 1 ,, 2 ,, 3 ,, 4	68.50 59.22 60.48 56.97 59.24	$\begin{array}{r} 66.75\\ 65.10\\ 62.41\\ \hline 61.33\\ \hline 62.86 \end{array}$	$67.33 \\ 62.32 \\ 61.63 \\ 58.91 \\ 61.18$
Faroe Islands Males 32 Females 33	No. 1	55.28	61.85	58.62
Iceland Males 27 Females 45	No. 1	62.04	64.27	63.43
$\begin{array}{ccc} \text{Coast of West Greenland} \\ \text{Males} & 6 \\ \text{Females} & 9 \end{array} \right\} \text{ Total 15.}$	No. 1	59.83	61.56	60.87
New Foundland Males 78 Total 146. Females 68 Average	No. 1 " 2	58.95 57.63 58.36	63.34 57.85 61.16	61.10 57.73 59.66
Pacific (north):         Alaska         Males       80         Females       79         Average	No. 1 " 2	58.24 57.35 57.68	60.61 60.88 60.80	59.29 59.20 59.23
coast of Peru     Males     79       Females     60     Total	No. 1 " 2	$\begin{array}{c} 60.52 \\ 53.54 \end{array}$	$\begin{array}{c} 61.15\\ 55.33\end{array}$	$\begin{array}{c} 60.76\\54.41\end{array}$
Average		57.43	57.95	57.65

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### Table No. 6 (continued).

			Average size.				
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.			
<b>-</b>		Engl. feet.	Engl. feet.	Engl. feet.			
C. Humpbacks.							
$\left.\begin{array}{c} Coast \ of \ Africa: \\ Cape \ Colony \ \dots \\ Males \ 11 \\ Females \ 16 \end{array}\right\} \ {\rm Total} \ 27.$	No. 1	39.45	41.38	40.59			
$\left. \begin{array}{c} \text{Coast of Congo, pelagic} \dots \dots \\ \text{Males} & 367 \\ \text{Females} & 473 \end{array} \right\} \text{ Total 840.} \\ \text{Average} \end{array} \right.$	No. 1 ,, 2 ,, 3	40.64 37.62 37.22 38.81	40.56 39.03 38.58 39.37	$     40.60 \\     38.42 \\     38.13 \\     \overline{ 39.13}   $			
$\left. \begin{array}{c} Pacific \ (north): \\ Alaska \dots \\ Males  54 \\ Females  52 \end{array}  ight\}  ext{Total } 106. \\ Average \end{array}$	No. 1 " 2	39.88 39.50 39.83	41.53 $41.60$ $41.54$	40.69 40.45 			
Coast of West Australia Males 2,138 Females 934 Total 3,072.	No. 1 ,, 2	40.29 37.13	40.21 37.59	40.27 37.30			
Average		38.84	38.57	38.75			

# Table No. 7.—Whales caught in the summer-season 1936, by species, sex and size.

1. Cape Colony. Blue-whales.

				witaros.			
	Number of		Total		Numl	ber of	Total
Engl. feet.	males. females.		Engl. feet.	males.	females.	animals.	
56	2	2	4	76		1	1
57	1	-	1	77	1	-	1
58		2	$\begin{array}{c}1\\2\\3\end{array}$	79	-	1	1
60	1	2 2 3 5		81	1	2	3
61	<b>2</b>	2	$\begin{array}{c} 4\\ 4\\ 7\end{array}$	83	-	1	1
62	1	3	4	84	-	1	1
63	<b>2</b>	5	7	85	-	2	$\begin{array}{c}1\\2\\2\end{array}$
64	3	1	4	87	_	$\begin{array}{c} 1\\ 2\\ 2\end{array}$	2
<b>65</b>	3	1	4	88		1	$\frac{1}{2}$
66	3	$\begin{array}{c}1\\2\\3\end{array}$	5	89		2	2
67	<b>2</b>	3	5				
68	4	1	5	Sum	<b>34</b>	45	79
69	1	$\begin{array}{c}1\\1\\2\\1\end{array}$	2	·			• • • • • • • • • •
70	1	2	3			lales:	66.47 feet
71	1	1	2	Average		emales:	70.98 "
<b>72</b>	$3 \\ 2$	-	4     4     5     5     5     2     3     2     3     2     1     3		L L	otal anima	ls: 69.04 "
73	<b>2</b>	-	2		( <b>N</b>	F.1	04
74	-	$\frac{1}{3}$	1	Per	$\operatorname{cent} \left\{ \begin{array}{c} M \\ T \end{array} \right\}$	lales: 43	
75	- ,	3	3		( F	emales: 56	.90

Table	No.	7	(continued).

	foot Total			Num	ber of	Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
41	-	1	1	65	6	3	9
43	_	1	1	66	10	7	17
45	1	-	1	67	10	3	13
46	1 2 5	-	$\frac{1}{2}$	68	9	1	10
47	5	$2 \\ 3$	17	69	6	$\begin{vmatrix} 2\\7 \end{vmatrix}$	8
48	6	3	9	70	1	7	8
49	13	9	22	71	3	3	6
50	16	8	24	72	1	3 5 2 5	8 6 2 6
51	<b>28</b>	11	39	73	-	2	2
52	25	24	49	74	1	5	6
53	19	28	47	75		1	1
54	<b>26</b>	21	47	76	-	4	4
55	19	9	28				
56	17	19	36	Sum	293	273	566
57	17	19	36	- Cuilli			
58	12	19	31		( )		
59	12	12	24			ales:	56.34 feet
60	7	15	22	Averag		emales:	57.76 "
61	8 5 3 5	10	18		•	otal anima	
62	<b>5</b>	9	14	Por		ales: 51	
63	3	4	7	Let	<sup>νοπν</sup> ) F	emales: 48	.23
64	<b>5</b>	6	11		•		

Fin-	wha	les.
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# 2. Coast of Congo, pelagic.

### Humpbacks.

	Numb	er of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals
$25 \\ 26$	1	-	1	43	18	34 30	52
20 27	$\frac{1}{2}$	$\frac{-}{2}$		$\begin{array}{c} 44 \\ 45 \end{array}$	$\begin{array}{c} 24\\11\end{array}$	30 22	$54 \\ 33$
28	2 2 3 8 7	ĩ	$\frac{4}{3}$	46	14	27	41
29	3	$1 \\ 5$	8	47	7	9	16
30	8	18	26	48	3	10	13
31	-	19	26	49	-	11	11
32	14	18	32	50	-	5	5
33	7	17	24	51	1	$\frac{2}{3}$	3
34	16	10	26	52	-	3	3
35	17	29	46	Sum	367	473	840
36	34	32	66		( )	· .	
37	22	40	62			ales:	38.81 feet
38 39	31	27	58	Averag	$e \text{ size} \left\{ \begin{array}{c} \mathbf{F} \\ \mathbf{T} \end{array} \right\}$	emales:	39.37 "
39 40	27 36	21 23	$\begin{array}{c} 48 \\ 59 \end{array}$		( I	otal anima	ls: 39.13 "
40	30 42	23	59 65	Dor	$\operatorname{cent} \left\{ \begin{array}{l} M \\ T \end{array} \right\}$	ales: 43	.69
41 42	$19^{42}$	$\frac{23}{35}$	54	rei	<sup>cent</sup> { F	emales: 56	.31

The Land	Num	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
$\begin{array}{c} 42\\ 44\\ 45\\ 46\\ 50\\ 51\\ 52\\ 53\\ 54\\ 55\\ 56\\ 57\\ \end{array}$	-1 1 2 8 1 2 3 2 4 5		$1 \\ 1 \\ 1 \\ 5 \\ 11 \\ 4 \\ 2 \\ 4 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$	66 67 68 69 70 71 72 73 74 75 77 Sum	$     \begin{array}{c}       1 \\       3 \\       - \\       2 \\       1 \\       1 \\       - \\       - \\       - \\       68     \end{array} $	$ \begin{array}{r} 3 \\ 5 \\ 2 \\ 5 \\ 3 \\ 4 \\ - \\ 1 \\ 3 \\ 1 \\ - \\ 79 \\ \end{array} $	$ \begin{array}{r}     4 \\     8 \\     5 \\     5 \\     5 \\     1 \\     1 \\     3 \\     3 \\     1 \\     147 \\ \end{array} $
$58 \\ 59 \\ 60 \\ 61 \\ 62 \\ 63 \\ 64 \\ 65$	$     \frac{4}{-3}     5     3     2     6     5   $	$     \begin{array}{c}       3 \\       4 \\       6 \\       1 \\       5 \\       5 \\       2 \\       7     \end{array} $	$     \begin{array}{r}       7 \\       4 \\       9 \\       6 \\       8 \\       7 \\       8 \\       12 \\     \end{array} $	Averag	e size $\begin{cases} M \\ F \\ T \end{cases}$	ales: emales: otal anima ales: 46. emales: 53.	59.24 feet 62.86 ,, ls: 61.18 ,, 26

### 3. Coast of Norway.

#### Fin-whales.

#### 4. New Foundland.

Fin-whales.

	Number of		Total		Num	ber of	Total	
Engl. feet.	males.	females.	animals. Eng	Engl. feet.	males.	females.	animals.	
50 51 52 53 54 55 56 57 50	5 2 2 3 3 10 1 5	$2 \\ 1 \\ 4 \\ 2 \\ 5 \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2$	7 3 5 5 15 2 7	$ \begin{array}{c c} 3\\ 6\\ 5\\ 15\\ 2\\ 7 \end{array} $	65 66 67 68 69 70 72 Sum	3 2 1 - - - 78	$ \begin{array}{r}     6 \\     6 \\     4 \\     3 \\     2 \\     2 \\     1 \\     \overline{68} \end{array} $	$9 \\ 8 \\ 5 \\ 3 \\ 2 \\ 2 \\ 1 \\$
$58 \\ 59 \\ 60 \\ 61 \\ 62 \\ 63 \\ 64$	$     \begin{array}{r}       6 \\       4 \\       12 \\       4 \\       7 \\       4 \\       4 \\       4     \end{array} $	$2 \\ 1 \\ 5 \\ 6 \\ 5 \\ 2 \\ 4$		Averag	e size $\begin{cases} M \\ F \\ T \end{cases}$	ales: emales: otal anima ales: 53 emales: 46	58.36 feet 61.16 ,, ls: 59.66 ,,	

#### Table No. 7 (continued).

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			• • • •	mulos,			
	Num	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
42	1	_	1	64	5	3	8
48	_	1	Ĩ	65	ĭ	4	5
50	3	$\overline{2}$	$\overline{5}$	66	$\overline{2}$	6	8
51	8	4	12	67	1	3	5 8 4 3 4 2
52	3	4	7	68	1	3	4
53	8	4	12	69	1	$\begin{array}{c} 3\\3\\2\\4\end{array}$	3
54	3	4	7	70	- 1	4	4
55	<b>2</b>	$2 \\ 2$	4	72	1	1	2
56		2	7	Sum	80	79	159
57	5	-	5				1 Laboration Laboration
58	5	5	10			ales:	57.68 feet
59	4	3	7	Averag		emales:	60.80 "
60	9	11	20		L T	otal anima	ls: 59.23 "
61	8	3	11		ſΜ	ales 50	31
62	$8 \\ 2 \\ 2$	4	6	Per	$\operatorname{cent} \left\{ \begin{array}{c} \mathbf{M} \\ \mathbf{E} \end{array} \right\}$	ales: 50. emales: 49.	69
63	<b>2</b>	4	6		•		
				1 fin-v	whale has	not been n	neasured.
			Hum	pbacks.			
35	3	2	5	48	_	5	5
36	9	7	16	49	1	1	5 2 3 1
37	5	5	10	51	_	3	3
38	5	5	10	54	_	1	1
39	7	3	10	Sum		52	106
40	4	2	6			·	
41	4 5	8	12			ales:	39.83 feet
42	5	3	8 3	Averag	e size { Fe	emales:	41.54 "
43	2	1			( Te	otal anima	ls: 40.67 ,,
44	4	1	5	-	. ( M	ales: 49.	.06
45	$4\\2\\2$	1	3	Per		emales: 50.	
46	$\frac{2}{2}$	4	6		ι		

#### 5. Alaska. Fin-whales.

# 6. Coast of Peru.

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12 humpbacks have not been measured.

#### Blue-whales. $\mathbf{48}$ 11 1 1 76 4 7 60 ----1 1 77 6 $\begin{array}{c} 6 \\ 6 \\ 2 \\ 2 \\ 2 \\ 2 \end{array}$ $\begin{array}{c}12\\7\\2\\2\\2\\2\end{array}$ $\mathbf{2}$ $\frac{1}{2}$ 61 78 1 ----621 ----79----64 --3 4 1 1 80 \_ 65 1 $\frac{1}{3}$ 82 --------67 84 ----21347376 68 67 135 68 Sum 69 ĩ \_ 14 Males: 70 17 72.12 feet $\frac{1}{9}$ Females: 73.90 Total animals: 73.00 71 9 Average size ,, $\mathbf{72}$ 16 ,, $\overline{73}$ 4 7 { Males: 50.37 Females: 49.63 74 10 17 $\mathbf{Per} \ \mathbf{cent}$ 8 756 14

### Table No. 7 (continued).

9	1
- 24	T

F	in-w	hali	88
	111-44	nar	53.

	Numl	per of	Total Encl. foot		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
$\begin{array}{c} 44\\ 46\\ 47\\ 48\\ 49\\ 50\\ 51\\ 52\\ 53\\ \end{array}$	$     \begin{array}{c}       1 \\       1 \\       2 \\       1 \\       7 \\       - \\       8 \\       8     \end{array} $	- - - - - - - - - - - - - - - - - - -	$     \begin{array}{c}       1 \\       1 \\       3 \\       1 \\       11 \\       2 \\       12 \\       13 \\       13 \\       13 \\       1       1       1       1       1       $	$65 \\ 66 \\ 67 \\ 68 \\ 69 \\ 70 \\ 71 \\ 72 \\ 73$	5     2     5     1     1     3     1     -     1	$-3 \\ 1 \\ -1 \\ 1 \\ 2 \\ 2 \\ -$	55612243221
54 55 56	8 3 2 5	5 6 5	13 9 7	74  Sum		60	1 139
$57 \\ 57 \\ 58 \\ 59 \\ 60 \\ 61 \\ 62 \\ 63 \\ 64$		$     \begin{array}{c}       3 \\       4 \\       3 \\       1 \\       1 \\       1 \\       1   \end{array} $	$     \begin{array}{c}       7 \\       9 \\       6 \\       6 \\       3 \\       4 \\       1 \\       2 \\       4   \end{array} $	Averag	$ \begin{array}{c} \text{ge size} \left\{ \begin{array}{c} M \\ F \\ T \end{array} \right. \\ \end{array} $	ales: emales: otal anima fales: 56. emales: 43.	57.43 feet 57.95 " ls: 57.65 "

#### 7. Coast of West Australia.

#### Humpbacks.

Engl. feet.	Number of		Total		Number of		Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
24	$\frac{1}{5}$	-	1	44	81	43	124	
25	5	-	$\frac{1}{5}$	45	44	41	85	
27		$\begin{array}{c} 2\\ 2\\ 2\end{array}$	$\frac{2}{6}$	46	16	32	48	
28	$\frac{4}{5}$	2	6	47	5	15	20	
29	<b>5</b>	2	7	48	4	11	15	
30	21	13	34	49	1	5	6	
31	30	21	51	50	-	1	1	
32	37	32	69	51	-	1	$\frac{1}{2}$	
33	50	35	85	52		2	2	
34	53	26	79	Sum	2,138	934	3,072	
35	217	128	345	Sum	2,130	934	3,072	
$\frac{36}{97}$	142	88	230					
37	133	82	215		∫ Males: 38.84 fe			
38	213	85	298	Average size $\begin{cases} Females: 38.57 , \\ Total animals: 38.75 , \end{cases}$				
39	190	51	241					
40	285	65	350		( )(	1	20	
$\begin{array}{c} 41 \\ 42 \end{array}$	$\frac{253}{194}$	$\begin{array}{c c} 45\\ 48\end{array}$	$\begin{array}{c} 298 \\ 242 \end{array}$	$Per cent \begin{cases} Males: 69.60 \\ Females: 30.40 \end{cases}$				
$\frac{42}{43}$	$194 \\ 154$	$\frac{48}{58}$	242 212		( r	emaies: 30.	40	

## Table No. 8.—Average production of oil per "blue-whale unit" in the summer-season 1936.

Other whales are reduced to blue-whale equivalents on the following basis: 1 blue-whale = 2 fin-whales =  $2\frac{1}{2}$  humpbacks = 6 sei-whales.

		Blue-whale	Oil production.	
Geographical areas.	Company.	equivalents.	Total.	Per blue-whale equivalent.
			Barrels.1)	Barrels.1)
Coast of Africa:				
Coast of Natal	No. 1	436.7	37,662	86.2
Cape Colony	,, 1	412.0	27,449	66.6
Coast of Congo, pelagic	,, I	80.7	9,669	119.8
	., 2	120.0	13,127	109.4
	,, 3	139.6	14,549	104.2
Average				109.7
Atlantic and Arctic:—				
	NT. I	11.0	9 1 50	<b>71</b> ~
Coast of Norway	No. 1 2	$\begin{array}{c} 44.2\\ 10.2 \end{array}$	$\substack{\textbf{3,159}\\\textbf{691}}$	$\begin{array}{c} 71.5 \\ 67.7 \end{array}$
	" 9	$10.2 \\ 30.2$	1.909	63.2
	<i></i>	18.7	1,909	61.3
Faroe Islands	$., 1^{4}$	34.7	2,400	69.2
Iceland	" ī	41.2	3,158	76.7
$\mathbf{Average}$				66.9
New Foundland	No. 1	60.8	4,587	75.4
	, 2	36.6	1,685	46.0
Average				64.5
Pacific, (north):				
Alaska	No. 1	86.9	7,104	81.7
Alaska		81.3	6,348	78.1
Average	, 2			80.0
British Columbia	No. 1	21.5	1,150	53.5
	,, 2	11.1	582	52.4
Average				53.1
Coast of Peru	No. 1	117.4	6,763	57.6
000001 0j 1 eru	,, 2	90.4	5,210	57.6
Average	,,			57.6
Coast of West Australia	No. 1	601.6	61,014	101.4
Coast of West Australia	No. 1 ,, 2	630.7	60,644	96.2
Average	.,, 4		00,044	98.7
Average				30.1

<sup>1</sup>) Barrel =  $\frac{1}{6}$  ton. (1 ton = 1,016 kg.).

