DET NORSKE HVALRÅDS STATISTISKE PUBLIKASJONER

INTERNATIONAL WHALING STATISTICS XVIII

EDITED BY

THE COMMITTEE FOR WHALING STATISTICS

OSLO 1948

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PREFACE

In accordance with the practice followed for the last seasons before the second world war, the Committee presents the whaling statistics for the first post-war season, 1945—46, in two separate publications.

The present publication, International Whaling Statistics XVIII, contains statistics for the Antarctic whaling in the season 1945–46. Statistics for the whaling in other parts of the world will be given in the next publication (No. XIX), which will appear in a few months.

The official documents containing the final act and protocol of the conference for the International Regulation of Whaling, held in Washington, D. C., November/December 1946, are reproduced in extenso on pp. 26–53.

Oslo, 20th March 1948.

Gunnar Jahn.

Birger Bergersen.

Harald B. Paulsen.

INTRODUCTION

The first post-war season in the Antarctic 1945-46.

During the 2nd world war 28 out of the 36 Antarctic factory ships were sunk or damaged. A considerable number of catchers, which were used for naval service, were also lost.

Only three of the eight floating factories which survived the war were intact. Of the 5 which were more or less damaged, 4 were put into condition for the season 1945–46. The catchers which remained at the end of the war were scattered all over the world, and the great majority of them had undergone substantial alterations in order to fit them for naval service.

Immediately after the conclusion of hostilities an energetic work was started to get as many expeditions as possible into activity in the season 1945–46. In England and Norway the authorities gave the whaling vessels precedence for refitting and repairs at the yards.

In order to remedy as much as possible the serious lack of fats which prevailed throughout the world contracts were placed in England, before the end of the war, for the building of 4 floating factories, 3 for British and 1 for Norwegian account.

The whaling material which stood ready to take part in the first post-war season 1945-46 was 9 factory ships, 3 shore stations and 93 catchers.

Pursuant to the International Agreement for the Regulation of Whaling signed at London on the 8th June 1937, as amended by the Protocols signed at London on the 24th June 1938 and the 7th February 1944 the whaling period was fixed at 24th November 1945 to 24th March 1946. Pursuant to the same Agreement and Protocols it was forbidden to take or kill grey-whales and/or right-whales, and to take or kill blue-, fin-, humpback- or sperm-whales below the following lengths:

Blue-whales	70	feet
Fin-whales	55	22
Humpbacks	35	"
Sperm-whales	35	"

It was further forbidden to use a factory ship or a whale catcher attached thereto for the purpose of taking or treating humpback whales in any waters south of 40° South.

		Spec	ies of wł	ales ca	ught.				Е	xpedition	s.	Number
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Other	- Total of whales. s.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	of whales per boat.
1010 00		0.010						Barrels.	_			
1919 - 20	1,874	3,213	261	71	8	1) 14		272,817	6	6	44	124
1920-21	2,617	5,491	260	36		1) 1:	,	390,627	6	8	47	180
1921 - 22	4,416	2,492	9	103	3	-	.,		6	8	46	153
1922 - 23	5,683	3,677	517	10	23	-	0,010	614,547	6	13	60	165
1923-24	3,732	3,035	233	193	66	¹) 12		464,678	7	13	66	110
1924 - 25	5,703	4,366		1	59	-	1	697,091	6	13	65	161
1925 - 26	4,697	8,916	364	195	37	1) l(6	15	70	203
1926 - 27	6,545	5,102	189	778	39	¹) 12			6	17	80	158
1927 - 28	8,334	4,459	23	883	72	1) 4	,		6	18	84	164
1928 - 29	12,734	6,689	48	808	62	-		1,631,340	6	26	111	183
1929 - 30	17,487	11,539	852	216	73	-		2,546,759	6	38	194	156
1930 - 31	29,410		576	145	51	1) 2	2 40,201	3,608,348	6	41	232	173
1931 - 32	6,488	2,871	184	16	13	-	- 9,572	808,560	2	5	45	213
1932 - 33	18,891	5,168	159	2	107		- 24,327	2,456,462	1	17	118	206
1933 - 34	17,349	7,200	872	-	666	-	- 26,087	2,395,544	2	19	126	207
1934 - 35	16,500	12,500	1,965	266	577	-	- 31,808	2,453,999	2	23	153	208
1935 - 36	17,731	9,697	3,162	2	399	-	- 30,991	2,436,338	2	24	175	177
1936 - 37	14,304	14,381	4,477	4 90	926	1)]	34,579	2,658,108	2	30	196	176
1937 - 38	14,923	28,009	2,079	161	867	´ -	- 46.039	3,340,330	2	31	256	180
1938 - 39	14,081	20,784	883	22	2,585	1)]	38,356		2	34	281	136
1939 - 40	11,480	18,694	2	81	1,938	²) 703			2	28	240	137
1940-41	4,943	7,831	2,675	110	804		1	1,100,008	1	11	93	176
1941 - 42	5 9	1.189	16	52	109	-	1 2 425	77,819	$\overline{2}$	-	12	119
1942 - 43	125	776	-	73	24	-	1000	50,960	ī	_	$\overline{6}$	166
1943 - 44	339	1.158	4	197	101	-		132,001	ĩ	1	15	120
1944 45	1.042	1.666	$6\hat{0}$	78	45	-	1 2 2 2 3	223,540	î	î	15	193
1945 - 46	3.606	9,185	238	85	273		- 13,387	818,652	3	9	$\frac{10}{93}$	144

¹) Right-whales. ²) 703 "Baleen-whales" no specification given, 2 right-whales.

In a Supplementary Agreement of 1945 it was provided that the expeditions which arrived too late at the catching grounds should be allowed to continue whaling operations after the 24th March 1946, for a period not exceeding two calendar months from that date, in no case, however, for a total period in excess of four months.

Owing to the extremely difficult conditions with respect to repairs and equipment, and especially to the refitting of catching boats, all the factory ships except 1 arrived too late at the catching grounds. At first the factory ships lacked catchers, but obtained these later, as they were sent from the yards.

In various quarters it had been assumed, prior to the departure of the expeditions in the autumn 1945, that the stocks of whales would have been replenished, since the Antarctic grounds during the war had not been subjected to any great taxation.

The experience of the expeditions in 1945–46 did not confirm these prognostications.

A survey of the whaling in the Antarctic from the season 1919-20 until and including the season 1945-46 is given in table *a* above.

		Specie	es of what	ales cau	ght.				I	Expeditio	ns.	Number
Years.	Blue.	Fin.	Hump- back.	Sei.	Spe r m.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	of whales per boat.
1919-20	887	1.540	182				2,609	Barrels. 125,788	_	6	18	145
1919-20 1920-21	1,761	2.848	157	_		_	2,009	213,490	1	8	26	140
1920-21 1921-22	1,761	1,782				-	3,628	213,490 203,475	1	8	20	140
1921-22 1922-23	2,114	2,232	197	-	4	-	3,028	203,475 266,994	1	12	$\frac{20}{37}$	123
1922-23 1923-24	1,805	1.657	103	$\overline{2}$	17	²) 12	3,596		1	12	43	84
1923-24 1924-25	2,191	2,347	103 97	4	$\frac{17}{35}$, ,	3,590 4,670		1	13	43	114
1924-25 1925-26	$2,191 \\ 2,842$	2,347 3,207	128	182^{-}		²) 10	6,394		1	12	41	136
1925-20 1926-27			128	413					1	14	57	130
1920-27 1927-28	2,856	$3,958 \\ 3,102$				²) 12 ²) 4	7,450	455,070 733,912	1	10	61	166
1927-28 1928-29	6,209	3,102 3,559	$\begin{array}{c} 23\\ 33\end{array}$	788	$\frac{12}{31}$,	10,138		1	25	88	173
1928-29 1929-30	$11,\!174 \\ 16,\!999$	3,559 8,143		412	31	-	15,209		1	38	167	175
1929-30 1930-31			510	1		²) 1	25,982		1	41	205	183
1930-31 1931-32	$28,325 \\ 6.050$	1.136	$\frac{510}{178}$		$\frac{27}{3}$	'	37,465	3,420,410 686,355		41 5		$ \begin{array}{r} 183 \\ 223 \end{array} $
1931 - 32 1932 - 33		4,441	178		3 107	-	7,367			17	112	$\frac{223}{208}$
1932 - 33 1933 - 34	$\begin{array}{c}18,\!624\\16,\!813\end{array}$	4,441 5.472	159 780		107 659	-	23,331	2,401,879		17	112	208
1933 - 34 1934 - 35				141		-	23,724		-	23	113	200
1934 - 35 1935 - 36				141	556	-	30,233			$\frac{23}{24}$	143	177
			3,121	$\frac{2}{10}$	396	-	29,206			$\frac{24}{30}$	184	177
1936 - 37				19	856	²) 1	32,821	2,576,479		30		178
1937 - 38				6	824	-	44,152	3,250,064		$\frac{31}{34}$	24 4 270	131
1938 - 39			883	3	2,468	$^{2})$ 1	36,681		-			130
1939-40			2	1	1,853	³) 704	31,709		-	28	228	
1940-41	4,936	7,084	2,675	22	778	-	15,495	1,055,510		11	88	176
1941 - 42			-	-	-	-		-		-	- 1	-
1942 - 43				-	-	-			-	-	-	105
1943-44	311	526	-	-	-	-	837	82,000		1	8	105
1944-45	914	679	-	2		-	1,595			1	8	199
1945 - 46	3,526	7,729		3	216	-	11,474	739,775		9	77	149

Table b.—Pelagic whaling in the Antarctic.¹

¹) For the seasons 1919/20-1930/31 the catch in the Ross Sea and from South Shetland and South Orkney is included in the figures for pelagic whaling in the Antarctic. ²) Right-whales. ³) 703 "Baleen whales" no specification given, 1 right-whale.

The result of the catch in 1945–46 was disappointing, due to the facts that whales were scarce, besides being emaciated, and weather conditions unfavourable.

As mentioned above 3 shore stations and 9 floating factories participated with a total of 93 catchers. 13,387 whales were killed, resulting in an oil production of 818,652 barrels. With the exception of the seasons during the second world war and the season 1931–32, when the greater part of the whaling fleet was laid up, this is the lowest production in the Antarctic recorded since 1925–26.

As from the season 1932-33 whaling in the Antarctic has been subject to restrictions, partly through voluntary quota agreements, partly through voluntary curtailment of the whaling seasons and finally through the International Whaling Agreement. When furthermore the varying number of participating floating factories and catchers is taken into consideration, it is evident that the whaling results cannot be directly compared from season to season.

Pelagic whaling.

From the season 1927–28 pelagic whaling in the Antarctic represents the predominant part of the total proceeds on these grounds.

n an		S	pecies of wl	hales caught	t.	
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Total.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1927–28	61.3	30.6	0.2	7.8	0.1	100
1928–29	73.5	23.4	0.2	2.7	0.2	100
1929–30	65.4	31.3	3.1	,	0.2	100
1930–31	75.6	23.0	1.3		0.1	100
1931–32	82.1	15.4	2.4		0.1	100
1932–33	79.8	19.0	0.7		0.5	100
1933–34	70.9	23.1	3.3		2.7	100
1934–35,	52.7	38.6	6.4	0.5	1.8	100
1935–36	56.5	31.4	10.7		1.4	100
1936–37	43.2	40.5	13.6	0.1	2.6	100
1937–38	33.5	59.9	4.6	0.1	1.9	100
1938–39	37.8	53.1	2.4		6.7	100
1939–40	36.7	57.3	·		6.0	100
1940–41	31.9	45.7	17.3	0.1	5.0	100
1943–44	37.2	62.8			<u> </u>	100
1944–45	57.3	42.6		0.1		100
1945–46	30.7	67.4			1.9	100

Table c.-Whales caught in the pelagic whaling. Percentage figures.

Table b, page 9, gives a survey of the pelagic whaling as from the season 1919-20 until and including 1945-46. In these figures is included the catch in the Ross Sea, as well as that off the South Shetlands and the South Orkneys from 1919-20 to 1930-31.

From the table it will be seen that no pelagic whaling was carried on in the Antarctic in 1941–42 and 1942–43. During the two following seasons whaling was carried on with 1 floating factory and 8 catchers. In 1945–46, the first post-war season, 9 floating factories participated with 77 catchers, and the output of oil amounted to 739,775 barrels. 11,474 whales were killed, of which 3,526 blue-whales, 7,729 fin-whales, 3 sei-whales and 216 sperm-whales. The number of blue-whales killed was small in relation to the total catch. Here we must naturally take into consideration the fact that the blue-whale appears more abundant during the Antarctic spring months. The late arrival of the expeditions at the whaling grounds may therefore be one of the reasons for the poor result of the blue-whale catch.

In table c above is given the relation between the various species of whales killed in the pelagic whaling in the Antarctic as from the season 1927-28.

As will be seen the percentage of blue-whales in relation to the total catch was 30.7 for the season 1945–46. During the season 1927–28 the blue-whales represented 61.3 per cent of the total catch for that season. During the season 1931–32, when the greater part of the whaling fleet was laid up, and, as known, only 5 British and South-African companies were engaged in pelagic whaling, the blue-whales killed represented 82.1 per cent of the total catch, and in 1932–33 the corresponding figure was 79.8 per cent. Even if due allowance is made for the alterations in the whaling period, these figures clearly indicate a marked decrease of the blue-whale stock.

A calculation of the average number of blue-whales killed per catcher in the pelagic whaling is given below for a series of seasons.

Season.		Blue-whales per catcher.
1932–33		
1933–34		137.7
1934–35	• • • • • • • • •	107.8
1935-36	·	101.3
1936–37		
1937-38	· · · · · · · · · · · · · · · · · · ·	58.3
1938–39	• • • • • • • • • •	50.1
1939-40	••••••	47.8
$1945 - 46 \dots$	••••••	38.8

In 1932–33 the catch amounted to 160 blue-whales per catcher, whereas the corresponding figure for the season 1945–46 was only 38.8. This decrease is even more noteworthy when the greater efficiency of the modern whaling equipment of later years is taken into consideration.

As in earlier volumes of International Whaling Statistics we have given specifications of the monthly catch in respect to the various species of whales, absolute figures in table d, on page 12, and percentage figures in table e, on page 13.

In table d is recorded the number of whales killed in each month. The monthly catch cannot be directly compared without considering at the same time the variations as to the whaling fleet as well as to the whaling periods. In the season 1935–36 whaling commenced on December 1st and in the season 1945–46 on November 24th, the figures for December thus comprising a full month's catch. As from the season 1936–37 until 1939–40 whaling commenced on December 8th, and the December figures for these years consequently only cover 24 days' catch.

The Japanese did not enter into the International Whaling Agreement, and the Japanese expeditions commenced whaling operations in November during the pre-war seasons.

In table e, on page 13 is given the percentage relation between the various species of whales in each month. It will appear from this table that the catch in December 1945-46 consisted of 51.6 per cent blue-whales. This is the lowest figure ever recorded for the December catch as far as the seasons 1927/28-1945/46 are concerned, with the exception of the two seasons 1938-39 and 1939-40, the blue-whales then representing respectively 50.5 and 45.7 per cent of the total catch in December. The blue-whale catch in January 1945-46 was 32.2 per cent, the lowest figure recorded for the same period, with the only exception of the season 1937-38 — with 31.3 per cent.

		of wholes						.h.		-	The Whal-
Fin-finals, Fin-final for the first sector for first sector for the fi			Oct.	Nov.	Dec.	Jan.	Feb.	Mare	Apri	Total.	tics' total figures.
Fin-finals, Fin-final for the first sector for first sector for the fi		(1935-36	_	265	9.411	10.352	7.301	1.877	-	29.206	29 .2 06
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			4						_		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			_	1,180					-		
		1938-39	_	1,353					-		¹) 36,681
	Total	1939-40	-	151		6,020	5,509	1,417	-	¹) 17,176	²) 31,709
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	animals.	1940-41	_	306	1,075	552		362	64	2,363	15,495
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			-	-	-	-	-	-	-		-
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			-	-	-				61		
Fin-193-36 100 - 6.874 - 5.244 - 3.311 - 981 - 16,510 - 16,510 - 16,510 - 14,177 - 14,183 - 193-39 678 - 6,873 - 4,405 - 2,051 - 819 - 14,177 - 14,183 - 193-39 846 - 5,124 - 4,899 - 2,368 - 602 - 13,839 - 13,839 - 13,849 - 1939-40 1,864 - 1,986 - 1,380 - 337 - 5,567 - 11,392 - 11 - 3 - 5,567 - 11,392 - 11 - 3			-						-		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		[1945-46	-	58	1,316	3,237	3,749	2 ,4 5 2	624	11,436	11,474
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(1935-36		100	6 874	5 944	3 311	981	_	16 510	16 510
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			2								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			5						_		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			_						_		
	Blue-		_						_		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			_	230					3		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			_		-				_		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1943-44	_	-	-	74	89	141	7	311	311
$Fin- \begin{cases} 1935-36 & - & 17 & 1,193 & 3,915 & 3,203 & 849 & - & 9,177 & 9,177 \\ 1936-37 & 1 & 7 & 1,165 & 4,445 & 6,118 & 1,555 & - & 13,291 & 13,302 \\ 1937-38 & - & 24 & 3,210 & 9,079 & 10,131 & 4,007 & - & 26,451 & 26,457 \\ 1938-39 & - & 64 & 3,605 & 6,959 & 7,661 & 1,788 & - & 19,477 & 19,477 \\ 1939-40 & - & - & - & 1,773 & 3,760 & 4,054 & 1,054 & - & 10,641 & 17,757 \\ 1940-41 & - & 36 & 267 & 166 & 4 & 346 & 61 & 880 & 7,084 \\ \hline - & - & - & - & - & - & - & - & - & -$		1944-45	_	7	321	318	172	96	-		914
$Fin-1 = \begin{bmatrix} 1936-37 & 1 & 7 & 1,165 & 4,445 & 6,118 & 1,555 & - & 13,291 & 13,302 \\ 1937-38 & - & 24 & 3,210 & 9,079 & 10,131 & 4,007 & - & 26,451 & 26,457 \\ 1938-39 & - & 64 & 3,605 & 6,959 & 7,061 & 1,788 & - & 19,477 & 19,477 \\ 1939-40 & - & - & -,773 & 3,760 & 4,054 & 1,054 & - & 10,641 & 17,757 \\ 1940-41 & - & 36 & 267 & 166 & 4 & 346 & 61 & 880 & 7,084 \\ \hline & - & - & - & - & - & - & - & - &$		1945-46	-	21	679	1,041	1,204	480	91	3,516	3,526
$Fin-1 = \begin{bmatrix} 1936-37 & 1 & 7 & 1,165 & 4,445 & 6,118 & 1,555 & - & 13,291 & 13,302 \\ 1937-38 & - & 24 & 3,210 & 9,079 & 10,131 & 4,007 & - & 26,451 & 26,457 \\ 1938-39 & - & 64 & 3,605 & 6,959 & 7,061 & 1,788 & - & 19,477 & 19,477 \\ 1939-40 & - & - & -,773 & 3,760 & 4,054 & 1,054 & - & 10,641 & 17,757 \\ 1940-41 & - & 36 & 267 & 166 & 4 & 346 & 61 & 880 & 7,084 \\ \hline & - & - & - & - & - & - & - & - &$		(1935-36		17	1 103	3 015	3 903	849		9 177	9 177
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			1								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							10 131	-	_		
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	Fin-		_	_					_		
$Sperm. \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			_	36			, , , , , , , , , , , , , , , , , , , ,		61		
$Sperm. whales. \begin{cases} 1944-45 & - & 22 & 178 & 170 & 187 & 122 & - & 679 & 679 \\ 1945-46 & - & 27 & 545 & 2,121 & 2,514 & 1,962 & 532 & 7,701 & 7,729 \\ 1935-36 & - & 4 & 1,214 & 1,107 & 749 & 47 & - & 3,121 & 3,121 \\ 1936 & 37 & - & 10 & 1,462 & 1,854 & 1,038 & 96 & - & 4,460 & 4,460 \\ 1937-38 & - & 233 & 582 & 513 & 474 & 237 & - & 2,039 & 2,039 \\ 1938-39 & - & 134 & 456 & 235 & 58 & - & - & 883 & 883 \\ 1939-40 & - & - & 2 & - & - & - & - & 2 & 2 \\ 1940-41 & - & 30 & 120 & 128 & - & 1 & - & 279 & 2,675 \\ \hline - & - & - & - & - & - & - & - & - & -$			-	_	-	_	_	_	-	-	-
$Sperm. whales. \begin{cases} 1945-46 & - & 27 & 545 & 2,121 & 2,514 & 1,962 & 532 & 7,701 & 7,729 \\ 1935-36 & - & 4 & 1,214 & 1,107 & 749 & 47 & - & 3,121 & 3,121 \\ 1936 & 37 & - & 10 & 1,462 & 1,854 & 1,038 & 96 & - & 4,460 & 4,460 \\ 1937-38 & - & 233 & 582 & 513 & 474 & 237 & - & 2,039 & 2,039 \\ 1938-39 & - & 134 & 456 & 235 & 58 & - & - & 883 & 883 \\ 1939-40 & - & - & 2 & - & - & - & - & 2 & 2 \\ 1940-41 & - & 30 & 120 & 128 & - & 1 & - & 279 & 2,675 \\ - & - & - & - & - & - & - & - & - & -$		1943-44	-	_	-	69	218	185	54	526	526
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1944-45	-	22	178		187		-		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1945-46	-	27	545	2,121	2,514	1,962	532	7,701	7,729
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		í 1935–36	_	4	1 214	1 107	749	47	_	3,121	3,121
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			_						-		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			_					1	_		
$Sperm- \begin{cases} 1940-41 & - & 30 & 120 & 128 & - & 1 & - & 279 & 2,675 \\ & - & - & - & - & - & - & - & - $	Hump-	1938-39	-		1				-		883
$Sperm- \begin{cases}$	backs.	1939-40	_	-	2	-		-		2	2
$Sperm. \\ Sperm. \\ whales. \begin{cases} 1935-36 & - & 142 & 130 & 86 & 38 & - & - & 396 & 396 \\ 1936-37 & - & 116 & 417 & 173 & 97 & 51 & - & 854 & 856 \\ 1937-38 & - & 245 & 397 & 78 & 60 & 41 & - & 821 & 824 \\ 1939-40 & - & 151 & 439 & 274 & 74 & 26 & - & 964 & 1,853 \\ 1940-41 & - & 10 & 57 & 38 & - & 4 & - & 109 & 778 \\ & - & - & - & - & - & - & - & - \\ 1945-46 & - & 10 & 92 & 75 & 29 & 9 & 1 & 216 & 216 \\ 1935-36 & - & 2 & - & - & - & - & - & - & - \\ 1945-46 & - & 10 & 92 & 75 & 29 & 9 & 1 & 216 & 216 \\ 1935-36 & - & 2 & - & - & - & - & - & 2 & 2 \\ 1936-37 & - & - & - & - & - & - & - & - & 2 & 2$		1940-41	-	30	120	128	-	1	-	279	$2,\!675$
$Sperm. \\ Sperm. \\ whales. \begin{cases} 1935-36 & - & 142 & 130 & 86 & 38 & - & - & 396 & 396 \\ 1936-37 & - & 116 & 417 & 173 & 97 & 51 & - & 854 & 856 \\ 1937-38 & - & 245 & 397 & 78 & 60 & 41 & - & 821 & 824 \\ 1939-40 & - & 151 & 439 & 274 & 74 & 26 & - & 964 & 1,853 \\ 1940-41 & - & 10 & 57 & 38 & - & 4 & - & 109 & 778 \\ & - & - & - & - & - & - & - & - \\ 1945-46 & - & 10 & 92 & 75 & 29 & 9 & 1 & 216 & 216 \\ 1935-36 & - & 2 & - & - & - & - & - & - & - \\ 1945-46 & - & 10 & 92 & 75 & 29 & 9 & 1 & 216 & 216 \\ 1935-36 & - & 2 & - & - & - & - & - & 2 & 2 \\ 1936-37 & - & - & - & - & - & - & - & - & - &$			-	-	-	-		-	-	-	
$Sperm- \begin{cases} 1936-37 & - & 116 & 417 & 173 & 97 & 51 & - & 854 & 856 \\ 1937-38 & - & 245 & 397 & 78 & 60 & 41 & - & 821 & 824 \\ 1938-39 & - & 309 & 953 & 533 & 499 & 168 & - & 2,462 & 2,468 \\ 1939-40 & - & 151 & 439 & 274 & 74 & 26 & - & 964 & 1,853 \\ 1940-41 & - & 10 & 57 & 38 & - & 4 & - & 109 & 778 \\ \hline & - & - & - & - & - & - & - \\ 1945-46 & - & 10 & 92 & 75 & 29 & 9 & 1 & 216 & 216 \\ \hline 1935-36 & - & 2 & - & - & - & - & - \\ 1935-36 & - & 2 & - & - & - & - & 2 & 2 \\ 1936-37 & - & - & - & - & - & 11 & 8 & - & 19 & 19 \\ 1937-38 & - & - & - & - & - & - & 6 & - & 6 & 6$		1945 - 46	-	-	-	-	-	-	-	-	-
$Sperm- \begin{cases} 1936-37 & - & 116 & 417 & 173 & 97 & 51 & - & 854 & 856 \\ 1937-38 & - & 245 & 397 & 78 & 60 & 41 & - & 821 & 824 \\ 1938-39 & - & 309 & 953 & 533 & 499 & 168 & - & 2,462 & 2,468 \\ 1939-40 & - & 151 & 439 & 274 & 74 & 26 & - & 964 & 1,853 \\ 1940-41 & - & 10 & 57 & 38 & - & 4 & - & 109 & 778 \\ & - & - & - & - & - & - & - & - $		(1935-36)	_	142	130	86	38	-	_	396	396
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1936-37	-	116				51	-	854	856
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		1937-38	-	245	397	78	60	41	-	821	824
$Sei- whales, \begin{cases} 1940-41 & - & 10 & 57 & 38 & - & 4 & - & 109 & 778 \\ & - & - & - & - & - & - & - & -$			-	309	953	533	499	168	-	2,462	2,468
$Sei. whales. \begin{bmatrix}$	whales.		-	151	439	274	74	26	-	964	1,853
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1940-41	-	10	57	38	-	4	-	109	778
$Sei. whales \left\{ \begin{array}{cccccccccccccccccccccccccccccccccccc$			-	-	-	-	-	-	-	-	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		[1945-46	-	10	92	75	29	9	1	216	216
$Sei- \begin{cases} 1936-37 & - & - & - & -111 & 8 & - & 199 & 199 \\ 1937-38 & - & - & - & - & - & -66 & - & 66 & 66 \\ 1938-39 & - & - & - & - & - & -114 & - & -114 & 1 \\ 1939-40 & - & - & - & - & - & -11 & -114 & -114 & 114 \\ 1939-40 & - & - & - & -114 &$		[1935-36]	_	2	_	_	-	_	_	2	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			_	_	_	_	11	8	_	19	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			_	-	_	-	-	6	_	6	
$\frac{5e^{-1}}{whales}$ 1939–40 1 - 1 1	Sei	1938-39	-	-	_	-	-		-		¹) 4
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			-	-	-	-	1	· -	-		1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	unuico.	1940-41	-	-	-	-	-	-	-	-	22
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			-	-	-	-	-	-	-	. —	
- (1940-46 - - - - 2 1 - 3 3			-	-	-	-	2	_	-	$\frac{2}{2}$	
		[1945-46]	-1	-			2	1	-	3	3

Table d.-Antarctic, pelagic whaling. Catch by months in absolute figures.

1) 1 right-whale included. 2) 1 right-whale, 703 "Baleen whales" included.

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Table e.-Antarctic, pelagic whaling. Catch by months in percentage figures.

	of whales easons.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	Total.	The Whal- ing Statis- tics' total figures.
Total animals	$\left\{\begin{array}{c} 1935 – 36 \\ 1936 – 37 \\ \cdots \\ \cdots \\ \cdots \\ \cdots \\ \cdots \\ \cdots \\ \end{array}\right.$	100,0 100,0	100,0 100,0	100,0 100,0	100,0 100,0	100,0 100,0	100,0 100,0	100,0 100,0	100,0 100,0	100,0 100,0
Blue- whales	$\left\{\begin{array}{c}1935-36\\1936-37\\1937-38\\1938-39\\1939-40\\1940-41\\\\1940-41\\1944-45\\1944-45\\1945-46\end{array}\right.$	75.0	37.7 75.5 57.5 62.5 75.2 - 24.1 36.2	$73.0 \\ 63.2 \\ 62.1 \\ 50.5 \\ 45.7 \\ 58.7 \\ - \\ 64.3 \\ 51.6$	50.7 45.2 31.3 38.8 33.0 39.9 - 51.7 65.2 32.2	$\begin{array}{c} 45.3\\ 27.1\\ 16.1\\ 23.7\\ 25.0\\ -\\ -\\ 29.0\\ 47.6\\ 32.1\\ \end{array}$	$52.3 \\ 22.5 \\ 16.0 \\ 23.5 \\ 23.8 \\ 3.0 \\ - \\ 43.3 \\ 44.0 \\ 19.6 \\ $	- - 4.7 11.5 - 14.6	56.5 43.2 33.5 37.8 32.4 46.4 - 37.2 57.3 30.8	56.5 43.2 33.5 37.8 36.7 31.9 - 37.2 57.3 30.7
Fin- whales	$\left\{\begin{array}{c}1935-36\\1936-37\\1937-38\\1938-39\\1939-40\\1940-41\\\\1943-44\\1944-45\end{array}\right.$	25.0	6.4 1.3 2.0 4.7 - 11.7 - 75.9	$12.7 \\ 14.1 \\ 29.0 \\ 35.6 \\ 43.5 \\ 24.8 \\ - \\ 35.7 \\$	37.8 37.7 64.5 55.1 62.5 30.0 - 48.3 34.8	$\begin{array}{r} 43.9\\ 61.4\\ 79.7\\ 70.7\\ 73.6\\ 100.0\\ -\\ 71.0\\ 51.8\end{array}$	$\begin{array}{r} 45.2\\ 70.5\\ 78.4\\ 69.8\\ 74.4\\ 95.6\\ -\\ 56.7\\ 56.0\\ \end{array}$	- - - 95.3 - 88.5	31.440.559.953.162.037.2-62.842.6	31.4 40.5 59.9 53.1 57.3 45.7 - 62.8 42.6
Huimp- backs	$ \begin{bmatrix} 1947 + 46 \\ 1945 - 46 \\ 1935 - 36 \\ 1936 - 37 \\ 1937 - 38 \\ 1938 - 39 \\ 1939 - 40 \\ 1939 - 40 \\ 1945 - 46 \end{bmatrix} $			$ \begin{array}{c} 33.7 \\ 41.4 \\ 12.9 \\ 17.7 \\ 5.3 \\ 4.5 \\ - \\ 11.2 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$	$ \begin{array}{c} 34.6 \\ 65.5 \\ 10.7 \\ 15.7 \\ 3.6 \\ 1.9 \\ - \\ 23.2 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$	$ \begin{array}{c} 51.8 \\ 67.0 \\ 10.3 \\ 10.4 \\ 3.7 \\ 0.6 \\ - $	$ \begin{array}{c} 30.0 \\ 80.0 \\ 2.5 \\ 4.3 \\ 4.7 \\ - \\ 0.3 \\ - \\ - \\ - \\ \end{array} $	85.2	$ \begin{array}{c} 42.0 \\ 67.3 \\ 10.6 \\ 13.6 \\ 4.6 \\ 2.4 \\ - \\ 11.8 \\ - \\$	
Sperm- whales	$\left\{\begin{array}{c}1935-36\\1936-37\\1937-38\\1938-39\\1939-40\\1940-41\\\\1945-46\end{array}\right.$		53.6 21.4 20.8 22.9 100.0 3.3 - 17.2	$1.4 \\ 5.0 \\ 3.6 \\ 9.4 \\ 10.8 \\ 5.3 \\ - \\ 7.0$	$0.8 \\ 1.4 \\ 0.6 \\ 4.2 \\ 4.5 \\ 6.9 \\ -2.3$	$0.5 \\ 1.0 \\ 0.5 \\ 5.0 \\ 1.4 \\ - \\ 0.8$	$\begin{array}{c} - \\ 2.3 \\ 0.8 \\ 6.6 \\ 1.8 \\ 1.1 \\ - \\ 0.4 \end{array}$		$1.4 \\ 2.6 \\ 1.9 \\ 6.7 \\ 5.6 \\ 4.6 \\ - \\ 1.9$	$1.4 \\ 2.6 \\ 1.9 \\ 6.7 \\ 6.0 \\ 5.0 \\ - \\ 1.9$
Sei- whales	$\begin{cases} 1935-36\\ 1936-37\\ 1937-38\\ 1938-39\\ 1939-40\\ 1940-41\\\\ 1944-45\\ 1945-46 \end{cases}$		0.8			0.1 - - - 0.6 0.1	0.4 0.1 0.1 - - - - -		0.1 0.1 - - 0.1 - 0.1	0.1 0.1 0.1 - - 0.1 - 0.1 - -

	1934-	-35.	1935-	-36.	1936-	-37.	1937-	-38.	1938-	-39.	1939-	-40.	1940-	-41.	42, 43.	1943-		1944-	-45.	1945-	-46.
	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	1941 - 1942 - 19442 - 19442 - 19442 - 19442 - 19442 - 19442 - 19442 - 19442 - 19442	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.
Blue-whales.																					
Immature																					01 50
males	2,058	24.56	2,369	26.50		29.14		23.57		27.53		26.73		36.80			31.08		25.64	000	21.58
females	2,489	33.20	2,804	37.07	2,600	37.91	2,392	33.90		And and a second s		32.46		33.68			28.83		31.13		28.40
animals	4,547	28.64	5,173	31.34	4,733	33.39	4,217	28.49	4,266	30.83	1,641	29.51	385	35.16	-	93	29.90	261	28.56	874	24.86
Mature																		1			
males	6,320	75.44	6,571	73.50	5,186	70.86						73.27		63.20			68.92		74.36		78.42
females	5,009	66.80	4,761	62.93	4,258	62.09	4,665	66.10	4,530	65.84		67.54		66.32			71.17		68.87		71.60
animals	11,329	71.36	11,332	68.66	9,444	66.61	10,584	71.51	9,573	69.17	3,920	70.49	710	64.84	•	218	70.10	653	71.44	2,642	75.14
Fin-whales.																					
Immature					ł.																
males	1,055	17.07	798	16.65				14.96		20.04		18.23		28.13			20.50		15.21	588	13.86
females	1,135	20.95	790	18.03	1,003	$17\ 20$	· · · ·	16.89	2,029			21.95		28.24		(Decomposition of the second sec	28.86		13.67		14.77
$\operatorname{animals}\ldots$	2,190	18.88	1,588	17.31	2,018	15.18	4,180	15.83	4,118	21.14	2,122	19.96	248	28.18		129	24.39	99	14.58	1,099	14.27
Mature																					
males		82.93		83.35	6,443		12,367			79.96	,	81.77		71.87			79.50		84.79		86.14
females	4,283	79.05	/				-	of the second second	7,026		· · · · · · · · · · · · · · · · · · ·	78.05		71.76			71.14		86.33		85.23
animals	9,409	81.12	7,588	82.69	11,273	84.82	22,232	84.17	15,359	78.86	8,510	80.04	632	71.82	-	400	75.61	580	85.42	6,602	85.73
Humpbacks.																					
Immature																					
$\mathrm{males}\ldots$		40.33		31.45		35.80		38.87		66.54		-		38.71			-	-	-		-
females	338	32.91	574	30.83	940	41.67	-	34.36	The second se	49.43				23.12							-
animals	701	36.38	969	31.08	1,729	38.77	732	36.06	482	54.59	-	-	79	28.32	-	-	-	-	-	-	-
Mature																					
males		59.67		68.55		64.20	467	61.13		33.46		-		61.29			-	-	-	-	
females	689	67.09	1,288	69.17			And and a supervised of the su	65.64		50.57				76.88					-		-
animals	1,226	$\bar{63.62}$	2,149	68.92	2,731	61.23	1,298	63.94	401	45.41			200	71.68	_		-	<u> </u>			

Table f.—Antarctic, pelagic whaling. Catch of immature and mature whales 1934/35—1945/46.

Whaling grounds and species of whales.	1934 -35	$1935 \\ -36$	$1936 \\ -37$	1937 -38	1938 -39	1939 -40	$1940 \\ -41$	$1941 \\ -42$	$1942 \\ -43$	$1943 \\ -44$	1944 -45	$1945 \\ -46$
Pelagic whaling.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.
Blue-whales. Males Females Total animals	77.39 79.88 78.57		78.77	79.70	79.57	79.74	80.03		-	79.87	76.34 79.29 77.91	79.85
Fin-whales. Males Females Total animals	$66.37 \\ 69.02 \\ 67.61$	69.43		69.72	68.92	68.96	$64.75 \\ 67.88 \\ 66.26$	-	-	67.55	66.25 68.89 67.33	69.20
Humpbacks. Males Females Total animals	$39.43 \\ 42.06 \\ 40.83$		39.77 41.39 40.59	41.95	40.47	-	$40.75 \\ 43.15 \\ 42.35$	-				-
South Georgia.												
Blue-whales, total Fin-whales, total Humpbacks, total Sperm-whales, total	$\begin{array}{c} 65.76\\ 44.19\end{array}$	$\begin{array}{c} 64.66\\ 40.29 \end{array}$		$\begin{array}{c} 64.52 \\ 41.53 \end{array}$	65.37	62.88 -	-	$\begin{array}{c} 64.65\\ 42.83 \end{array}$	64.78 -	$\begin{array}{c} 65.23 \\ 40.50 \end{array}$	$73.38 \\ 65.36 \\ 42.03 \\ 48.91$	$\begin{array}{c} 66.16 \\ 41.47 \end{array}$

Table g.—Average size of whales killed in the Antarctic, by whaling grounds and species of whales 1934/35—1945/46.

Table f on page 14 gives the number of immature and mature animals and their percentage proportion for a series of years.

According to these figures, the result of the season 1945–46 is favourable, the percentage number of immature whales being lower than during the preceding seasons. 24.86 per cent of the blue-whales killed and 14.27 per cent of the finwhales were immature. We must go as far back as to the season 1933–34 to find a lower percentage of immature animals.

In table g above, we give the figures for the average size of blue-whales, fin-whales, and humpbacks in the period 1934/35-1945/46, specified in respect to males, females and all animals.

As is known, the minimum measurement limits have varied during this period. In accordance with Article 7 in the International Agreement of 1937 on Regulation of Whaling it has since and including the season 1937–38 been forbidden to take or kill any blue-, fin-, humpback-, or sperm-whales below the following lengths:—

Blue-whales	70	${\bf feet}$
Fin-whales	55	"
Humpbacks	35	,,
Sperm-whales	35	,,

In order to obtain a better basis for comparison we have in table h deducted in the calculations all blue-whales under 70', all fin-whales under 55' and all humpbacks under 35'.

	$1933 \\ -34$	$1934 \\ -35$	$1935 \\ -36$	1936 -37	$\begin{array}{c}1937\\-38\end{array}$	1938 -39	$1939 \\ -40$	1940 41	1941–42 and 1942–43	1943 -44	1944 -45	1945 -46
Blue-whales.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.
Males Females Total animals.	79.60 82.70 80.99	81.30	80.53	80.30	$77.76 \\ 80.30 \\ 78.97$		80.30			$75.88 \\ 79.96 \\ 78.03$	79.37	80.31
Fin-whales. Males Females Total animals.	$67.49 \\ 70.69 \\ 69.02$	69.08	69.50	69.65	$\begin{array}{c} 66.38 \\ 69.76 \\ 67.89 \end{array}$	68.97	69.03	68.03		$\begin{array}{c} 65.28 \\ 67.61 \\ 66.37 \end{array}$	$\begin{array}{c} 66.28 \\ 68.89 \\ 67.55 \end{array}$	
Humpbacks. Males Females Total animals.	$39.03 \\ 42.33 \\ 41.00$	42.72		42.18	42.22	40.75	-	40.75 43.31 42.45	-	-	-	-

Table h.—Average size of whales killed, by species and sex 1933/34—1945/46, excl. of blue-whales less than 70', fin-whales less than 55' and humpbacks less than 35'. Antarctic, pelagic whaling.

If we look at the average size of the blue-whales, we find that there is a definite decrease from the season 1933–34 up to and including 1944–45, the second war season 1940–41 excepted. For 1945–46 the figures show some increase, although they are still lower than for the pre-war seasons.

The average size of the fin-whales is more uniform. The figures for the seasons 1938–39 and 1939–40 are, however, somewhat lower than for the preceding seasons, whereas the figures for the first post-war season 1945–46 show an increase again.

In the publication "Hvalrådets skrifter" the pelagic activities of the Norwegian floating factories are shown separately for the following 4 areas:

Area	\mathbf{II}	between	0°	and	60°	west.	
Area	\mathbf{III}	,,	0°	and	70°	east.	
Area	IV	,,	70°	east	and	1 3 0°	east.
Area	V	"	130°	east	and	170°	west.

It has now been possible to distinguish between the catch within the demarkations of these 4 areas for the seasons 1933/34-1945/46. This distinction has been maintained for practically the entire catch. For the seasons 1939-40and 1940-41, however, information is missing in regard to Japanese and British operations. The figures are given in table *i*, next page.

From the figures in this table (i) the summary statements in table j and k, page 18 have been prepared.

As will be seen from table k, the catch in area II has consisted of 33.44 per cent blue-whales and 62.64 per cent fin-whales, and in area III of 48 per cent

	_											Anna W			All areas		
	Species of		Area II.			Area III.			Area IV.			Area V.			An areas		TheWhaling Statistics'
	whales.	Number		Average	Number		Average	Number of		Average size of	Number of		Average size of	Number of		Average size of	total figures
N	Seasons.	of whales	Per cent.	size of the	of whales	Per cent.	size of the	whales	Per cent.	the	whales	Per cent.	the	whales	Per cent	the	for whales caught.
	seasons.	caught.		whales.	caught.		whales.	caught.		whales.	caught.		whales.	caught.		whales.	caught.
-	Blue-whales.			Eng. ft.			Eng. ft.			Eng. ft.			Eng. ft.			Eng. ft.	
	933-34	1,589	9.46	-	7,498	44.65	80.22	7,670	45.68	80.79	35	0.21	81.31			80.51	16,813
	934-35	2,224	14.01	79.35	8,229	51.83	77.31	5,423	34.16	80.17	-	-		15,876		78.57	15,944
	935–36	3,791	22.97	78.47	9,542	57.81	76.95	3,016	18.27	79.20	156	0.95	80.46			77.75	16,510
	936–37	4,158	29.33	78.45	4,940	34.84	77.26	5,079	35.83	76.93	-	-		14,177	100	77.49	14,183
	937–38	2,821	19.06	78.84	6,223	42.04	78.40	5,757	38.90	78.23		-		14,801	100	78.42	14,826
1	938–39	3,440	24.86	79.03	4,469	32.29	77.24	4,920	35.55	78.92	1,010	7.30	79.72			78.11	13,849
1	939-40	3,441	61.88	78.23	734	13.20	76.84	1,386	24.92	78.72	-	-	-	5,561	100	78.17	11,392
1	$940-41^{1}\dots$	881	80.46	77.78	214	19.54	78.52	-		-	-	-		1,095		77.92	4,936
1	943-44	311	100.00	77.93		-	-		-	-	-	-		311	100	77.93	311
1	944-45	914	100.00	77.91	-	-	-	-	-	-	-	-	-	914		$77.91 \\ 78.25$	$\begin{array}{c} 914 \\ 3.526 \end{array}$
1	945-46	599	17.04	78.29	2,917	82.96	78.24		-					3,516	and the second se		
1	$\overline{933/34} - \overline{1945/46}$	24,169	23.38	78.71	44,766	43.30	77.92	33,251	32.16	79.00	1,201	1.16	79.86	103,387	100	78.47	113,204
~	Fin-whales.		1														
1	933-34	1.115	20.38	68.94	$2,\!178$	39.81	68.37	2,177	39.79			0.02	65.00			68.99	$5,\!472$
	$934 - 35 \dots$	2,246		68.23	7,985	68.84	67.08	1,368	11.80			-		11,599		67.61	11,664
	$935 - 36 \dots$	3,375	36.78	67.80	5,236	57.06	67.47	548	5.97	69.39	17	0.19	69.82			67.72	9,177
	936–37	6,004	45.17	67.76	5,002	37.64	68.08	2,285	17.19	67.31		-		13,291	100	67.80	13,302
	937-38	11,505	43.56	67.63	8,297	31.41	67.89	6,610	25.03	68.21	-	-		26,412		67.86	26,457
	$938-39\ldots$	6,257	32.13	67.40	5,711	29.32	66.46	$5,\!547$	28.48	67.46		10.07	68.11			67.21	19,477
1	939–40	7,840	73.74	67.39	2,218	20.86		574	5.40	67.49	-	-	-	10,632		67.29	17,757
	$940-41^{1}$)	831	94.43	66.19	49	5.57	67.41	-	-	-	-			880		66.26	7,084
1	$943-44\ldots$	529	100.00	66.29	_		-	-		-	-	-	-	529		66.29 67.22	$\begin{array}{c} 529 \\ 679 \end{array}$
	$944-45\ldots$	679	100.00	67.33		-	-	-		-	-	-		679 7,701		$\begin{array}{r} 67.33\\ 67.48\end{array}$	679 7,729
1	$945-46\ldots$	4,901	63.64	67.68	2,800	36.36	-		_								
$\overline{1}$	933/34-1945/46	45,282	42.78	67.61	39,476	37.30	67.40	19,109	18.05	68.14	1,980	1.87	68.12	105,847	100	67.65	119,327
-	Humpbacks.																
1	933-34	113	14.68	38.43	86	11.17	37.37	571	74.15			-		770		40.09	780
	$934 - 35 \dots$	57	2.96	42.61	539	27.97	41.38	1,331	69.07	40.54		-	-	1,927		40.83	1,928
	935-36	288	9.24	40.81	1,888	60.55	41.34	938	30.08	41.78	1	0.13	43.00			41.43	3,121
	936–37	242	5.43	41.86	2,780	62.33		1,438	32.24	40.54		-	-	4,460		40.59	4,462
	937–38	335	16.50	40.96	829	40.84	41.01	866	42.66			-	-	2,030	100	41.07	2,039
1	938–39	-	-	_	_	-	-	859	97.28	39.63	24	2.72	39.79			39.64	883
1	$940-41^{1})\dots$	231	82.80	42.60	48	17.20		-						279		42.35	2,675
ī	933/34-1945/46	1,266	9.40	41.23	6,170	45.82	40.87	6 003	44.58	40.72	28	0.20	40.21	13,467	100	40.82	²) 15,890

Table i.-Number and average size of whales caught in the different areas of Antarctic. Pelagic whaling.

¹) Summary for 3 expeditions. ²) 2 whales caught in the season 1939-40 are included.

Areas	Blue-v	Blue-whales		vhales	Hump	b acks	Sperm-	whales	Total		
Altas	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	
II III IV V	$\begin{array}{r} 24,169 \\ 44,766 \\ 33,251 \\ 1,201 \end{array}$	$23.38 \\ 43.30 \\ 32.16 \\ 1.16$	45,282 39,476 19,109 1,980	18.05		45.82	$2,842 \\ 2,436$	$40.90 \\ 35.06$, ,	40.61	
Total	103,387	100.00	105,847	100.00	13,467	100.00	6,948	100.00	229,649	100.0	

Table j.--Number of whales killed during the seasons 1933/34-1945/46.

Table k.-Number of whales killed during the seasons 1933/34-1945/46.

	Are	a II	Area III		Are	a IV	Are	a V	Total	
Species of whales	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent
Blue-whales Fin-whales	45,282	62.64	$44,766 \\ 39\ 476$	42.33	33,251 19,109	31.43	,	59.80	103,387 105,847	46.09
Humpbacks Sperm-whales			$6,170 \\ 2,842 \\$					$\begin{array}{r} 0.85\\ 3.08\\ \end{array}$	/	
Total	72,285	100.00	93,254	100.00	60,799	100.00	3,311	100.00	229,649	100.00

Table I.—Number and gross tonnage of floating factories and catchers engaged in pelagic whaling in the Antarctic 1933/34—1946/47.

	F	loating facto	ries	Catchers					
Seasons		Gross	Average gross		Gross	Average per	r catcher of:		
	Number	tonnage	tonnage per fl. factory	Number	tonnage	Gross tonnage	I.H.P.		
1933-34	19	238,616	12,559	112	28,672	256	883		
$1934 - 35 \dots$	23	263,379	11,451	143	36,322	254	894		
$1935 - 36 \dots$	24	289,303	12,054	165	42,405	257	907		
1936–37	30	370,380	12,346	184	51,888	282	1,028		
1937–38	31	408,332	13,172	244	71,980	295	1,107		
1938–39	34	467,534	13,751	270	80,460	298	1.139		
1939-40	28	382,650	13,666	238	70,954	298	1,127		
1940–41	11	163,725	14,884	86	27,520	320	1,206		
	-	-	-	-	-	-	-		
1943-44	1	14,362	14,362	8	2,180	310	1,238		
1944-45	1	12,215	12,215	8	2,180	310	1,238		
1945-46	9	123,499	13,722	77	24,326	316	1,239		
1946-47	15	198,179	13,212	129	41,301	320	1,266		

blue-whales and 42.33 per cent fin-whales. In area IV the blue-whales are predominant with 54.69 per cent, the fin-whales representing 31.43 per cent and the humpbacks and sperm-whales 13.88 per cent.

In area V only 3,311 whales have been killed. This material is inadequate to give a correct picture of the composition of the stock.

Table l above gives a survey of the tonnage of floating factories and catchers, the average tonnage per floating factory and per catcher, and average

I. H. P. per catcher for a series of years. The figures for the season 1946–47 are included, but apart from that, these statistics do not extend beyond the Antarctic season 1945–46. Statistics of operations in the Antarctic in the season 1946–47 will be given in a later issue of this publication. Only the following information is given here:

During the season 1946-47 15 floating factories and 129 catchers were engaged in pelagic whaling. Pursuant to International Whaling Agreement of 1945 the whaling period for pelagic whaling in the Antarctic in the season 1946-47 was restricted to 4 months – from 8th December 1946 to 7th April 1947, both days included. According to reports 23,043 whales were killed, resulting in an oil production of 1,794,424 barrels.

South Georgia.

Table *m* below gives a survey of the whaling off South Georgia as from 1919–20. In the season 1945–46 3 shore stations were engaged, namely one Argentine, one British and one Norwegian station. The Argentine shore station has carried on whaling continuously since the season 1904–05.

During the season 1945–46 the catch amounted to 1,913 whales, yielding 78,877 barrels of oil.

During the season 1944-45 one single station produced 75,540 barrels of

		Spe	cies of wl	hales car	ught.					I	Expeditio	ns.	Number
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Oth	ers.	Total of whales.	Oil production	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	of whales per boat.
									Barrels				
1919 - 20	987	1,673		71	8	1)	14	2,832	147,029	6	-	26	109
1920-21	856	2,643	103	36	31		13	3,682	177,137	5	-	21	175
1921 - 22	2,570	710	9	103	3			3,395	249,042	5	-	20	170
1922 - 23	3,569	1,445	320	10	19			5,363	347,553	5	1	23	233
1923 - 24	1,927	1,378	130	191	49			3,675	247,463	6	-	23	160
1924 - 25	3,512	2,019	262	1	24		-	5,818	406,176	5	1	- 24	242
1925 - 26	1,855	5,709	236	13	12			7,825	404,457	5	1	23	340
1926-27	3,689	1,144		365	17			5,215	417,292	5	1	23	227
1927 - 28	2,125	1,357	-	95	60			3,637	303,480	5	1	23	158
1928 - 29	1,560	3,130	15	396	31			5,132	348,629	5	1	23	223
1929-30	488	3,396	46	216	39			4,185	247,963	5		27	155
1930-31	1,085	1.416	66	144	24		1	2,736	187,938	5	-	27	101
1931-32	438	1,735	6	16	10		_	2,205	122,205	2	_	12	184
1932-33	267	727	_	2	_			996	54,583	1	_	6	166
1933 - 34	536	1,728	92		7			2,363		2	-	11	215
1934 - 35	556	836	37	125	21		_	1,575	108,141	$\overline{2}$	_	10	158
1935 - 36	1.221	520	41		3			1,785	143.185	$\overline{2}$		10	179
1936 - 37	121	1.079	17	471	70			1,758	81,629	$\overline{2}$		12	147
1937 - 38	97	1.552	40	155	43			1.887		$\overline{2}$	_	$\overline{12}$	157
1938 - 39	232	1,307	_	19	117			1,675		$\overline{2}$	_	11	152
1939 - 40	88	937	_	80	85	1)	1	1,191	64,782	$\overline{2}$	_	$\overline{12}$	99
1940-41	7	747	_	88	26		_	868	44,498	ī		5	174
1941 - 42	59	1,189	16	52	109		_	1,425		$\hat{2}$		12	119
1942-43	125	776	-	73	24			998	50,960	ĩ		6	166
1943-44	28	632	4	197	101		-	962	50,000 50,001	î	_	$\ddot{7}$	137
1944 - 45	128	987	60	76	45		-	1,296	75,540	î	-	$\frac{1}{7}$	185
1945-46	80	1,456	238	82	$\overline{57}$		_	1,913		$\hat{\overline{3}}$	-	16	120

Table m.-South Georgia.

¹) Right-whales.

	ies of whales d seasons.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	Total.	The Whal- ing Statis- tics' total figures.
Total		81 33 51 8	204 131 240 124	289 421 453 318	369 659 332 341	$316 \\ 333 \\ 218 \\ 218 \\ -$	$307 \\ 203 \\ 343 \\ 172 \\ -$	$192 \\ 107 \\ 38 \\ 10 \\ -$		1,758 1,887 1,675 1,191	1,887
	$\begin{cases} 1941-42\\ 1942-43\\ 1943-44\\ 1944-45\\ 1945-46\\ \end{cases}$	5 - - 46	87 91 25 91 360	$185 \\ 238 \\ 171 \\ 436 \\ 455$	237 292 211 332 349	$118 \\ 107 \\ 177 \\ 150 \\ 296$	$179 \\ 162 \\ 110 \\ 156 \\ 315$	$\begin{array}{r} 61 \\ 92 \\ 121 \\ 126 \\ 92 \end{array}$	16 7 5 -	872 998 822 1,296 1,913	1,425 998 962 1,296
Blue-	$\begin{cases} 1936-37\dots \\ 1937-38\dots \\ 1938-39\dots \\ 1939-40\dots \\ 1940-41\dots \\ \end{cases}$	9 4 - 1 -	66 3 7 33 -	19 15 131 9 -	$21 \\ 36 \\ 35 \\ 28 \\ -$	3 34 24 15 -	$2 \\ 4 \\ 32 \\ 2 \\ -$	1 1 3 - -	- - - -	121 97 232 88	88 7
whales.	$ \begin{vmatrix} 1941 - 42 \dots \\ 1942 - 43 \dots \\ 1943 - 44 \dots \\ 1944 - 45 \dots \\ 1945 - 46 \dots \\ \end{vmatrix} $	- - 7	$1 \\ 29 \\ 2 \\ 31 \\ 50$	$9\\75\\9\\12\\11$	$ \begin{array}{c} 11 \\ 17 \\ 10 \\ 9 \\ 1 \end{array} $	$2 \\ 2 \\ -14 \\ 5$	$3 \\ 1 \\ 1 \\ 26 \\ 5 \\ 5 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 5 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 26 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ $	$\begin{array}{c} -1\\ 2\\ 36\\ 1\end{array}$	-	$26 \\ 125 \\ 24 \\ 128 \\ 80$	$ 125 \\ 28 \\ 128 \\ 80 $
Fin-	$\begin{cases} 1936-37\ldots \\ 1937-38\ldots \\ 1938-39\ldots \\ 1939-40\ldots \\ 1940-41\ldots \end{cases}$	70 28 51 7 -	136 118 232 87	254 381 318 296 -	301 600 292 299 -	$253 \\ 264 \\ 189 \\ 154 \\ -$	51 90 211 86 -	$ \begin{array}{r} 14 \\ 71 \\ 14 \\ 10 \\ - \\ - \end{array} $		1,079 1,552 1,307 939	1,55 2 1,307 939 747
whales.	$ \begin{array}{c} 1941 - 42 \dots \\ 1942 - 43 \dots \\ 1943 - 44 \dots \\ 1944 - 45 \dots \\ 1945 - 46 \dots \\ \end{array} $	5 - - 37	$83 \\ 62 \\ 23 \\ 60 \\ 274$	$164 \\ 163 \\ 146 \\ 420 \\ 274$	$208 \\ 275 \\ 176 \\ 305 \\ 308$	$92 \\ 94 \\ 49 \\ 91 \\ 278$	$123 \\ 141 \\ 45 \\ 81 \\ 232$	$42 \\ 32 \\ 101 \\ 30 \\ 53$	- 9 3 - -	$717 \\ 776 \\ 543 \\ 987 \\ 1,456$	$\begin{array}{c} 632\\987\end{array}$
Hump- backs.		- - - - -		7 20 11 - - 168		- 2 - - - 3 1		- - - - 45 1	-	$17 \\ 40 \\ -12 \\ -4 \\ 60 \\ 238$	
Sperm- whales.			$1 \\ 10 \\ 1 \\ 4 \\ - \\ 3 \\ -$	$9 \\ 5 \\ 4 \\ 13 \\ - \\ 1 \\ - \\ 16 \end{bmatrix}$		9 - 5 29 - 8 7 19	$34 \\ 18 \\ 87 \\ 34 \\ -30 \\ 16 \\ 21$	$ \begin{array}{r} 10 \\ 4 \\ 15 \\ - \\ - \\ 16 \\ 1 \\ 17 \end{array} $	- - - - 4	$70\\43\\117\\84\\-71\\24\\89$	43 117 84 26 109 24
	$\begin{array}{c} 1943-44 \dots \\ 1944-45 \dots \\ 1945-46 \dots \\ 1936-37 \dots \\ 1937-38 \dots \\ 1938-39 \dots \\ 1939-40 \dots \end{array}$	- 2 1 - -	- 7 - -	10 4 2 - - -	$ \begin{array}{c} 12 \\ 12 \\ 6 \\ 33 \\ - \\ 10 \\ \end{array} $	19 14 8 51 33 - 20	$21 \\ 12 \\ 15 \\ 219 \\ 91 \\ 13 \\ 50 \\ 12 \\ 12 \\ 13 \\ 50 \\ 12 \\ 12 \\ 12 \\ 13 \\ 50 \\ 12 \\ 12 \\ 12 \\ 13 \\ 13 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10$	17 17 167 31 6	4 3 - - -	89 45 57 471 155 19 80	45 57 471 155 19
Sei- whales.	$\begin{array}{c} 1939-40\ldots \\ 1940-41\ldots \\ 1941-42\ldots \\ 1942-43\ldots \\ 1943-44\ldots \\ 1944-45\ldots \\ 1945-46\ldots \end{array}$			-		$20 \\ -16 \\ 4 \\ 109 \\ 28 \\ 4 \\ -109 \\ 28 \\ 4 \\ -100 \\ -10$	$50 \\ -23 \\ 4 \\ 43 \\ 31 \\ 57 \\ -23 $	-35811520	- - 7 - 2 -		88 52 73 197 76

Table n.—South Georgia. Catch by months in absolute figures.

Table o.-South Georgia. Catch by months in percentage figures.

	of whales seasons.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	Total.	The Whal- ing Statis- tics' total figures.
Total animals	$\left\{\begin{array}{c} 1936-37\\ 1937-38\\ \cdots\\ \cdots\\ \cdots\\ \cdots\\ \end{array}\right.$	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0		100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
Blue- whales	$\left\{\begin{array}{c}1936{-}37\\1937{-}38\\1938{-}39\\1939{-}40\\1940{-}41\\1941{-}42\\1942{-}43\\1943{-}44\\1944{-}45\\1945{-}46\end{array}\right.$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	32.4 2.3 2.9 26.6 - 1.1 31.9 8.0 34.1 13.9	$\begin{array}{c} 6.6\\ 3.6\\ 28.9\\ 2.8\\ -\\ 4.3\\ 31.5\\ 5.3\\ 2.8\\ 2.4\end{array}$	5.7 5.5 10.5 8.2 - 4.6 5.8 4.7 2.7 0.3	$1.0 \\ 10.2 \\ 11.0 \\ 6.9 \\ - \\ 1.7 \\ 1.9 \\ - \\ 9.3 \\ 1.7$	$0.7 \\ 2.0 \\ 9.3 \\ 1.2 \\ - \\ 1.7 \\ 0.6 \\ 0.9 \\ 16.7 \\ 1.6 \\ 0.9 \\ 1.6 \\ 0.9 \\$	$0.5 \\ 0.9 \\ 7.9 \\ - \\ 1.1 \\ 1.7 \\ 28.6 \\ 1.1$		6.95.213.97.42.912.52.99.94.2	$\begin{array}{c} 6.9 \\ 5.2 \\ 13.9 \\ 7.4 \\ 0.8 \\ 4.1 \\ 12.5 \\ 2.9 \\ 9.9 \\ 4.2 \end{array}$
Fin- whales	$\left\{ \begin{array}{c} 1936{-}37\\1937{-}38\\1938{-}39\\1939{-}40\\1940{-}41\\1941{-}42\\1942{-}43\\1942{-}43\\1943{-}44\\1944{-}45\\1945{-}46\\\end{array} \right.$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 66.6\\ 90.1\\ 96.7\\ 70.2\\ -\\ 95.4\\ 68.1\\ 92.0\\ 65.9\\ 76.1\\ \end{array}$	$87.9 \\90.5 \\70.2 \\93.1 \\- \\89.1 \\68.5 \\85.4 \\96.3 \\60.2$	$81.6 \\ 91.0 \\ 88.0 \\ 87.7 \\ - \\ 87.8 \\ 94.2 \\ 83.4 \\ 91.9 \\ 88.2 \\$	$80.1 \\79.3 \\86.7 \\70.6 \\- \\78.0 \\87.9 \\27.7 \\60.7 \\93.9 \\$	$16.6 \\ 44.3 \\ 61.5 \\ 50.0 \\ - \\ 68.7 \\ 87.0 \\ 40.9 \\ 51.9 \\ 73.6 \\ $	7.3 66.4 36.8 100.0 - 68.9 34.8 83.5 23.8 57.6	- - - 56.3 42.9 - -	$61.4 \\ 82.2 \\ 78.0 \\ 78.8 \\ - \\ 82.3 \\ 77.8 \\ 66.1 \\ 76.2 \\ 76.1 \\ $	61.4 82.2 78.0 78.8 86.1 83.4 77.8 65.7 76.2 76.1
Hump- backs	$\left\{\begin{array}{c} 1936-37\\ 1937-38\\ - \\ 1941-42\\ 1942-43\\ 1943-44\\ 1944-45\\ 1945-46\end{array}\right.$		0.5	2.4 4.7 - 6.0 - - 36.9	$2.2 \\ 2.7 \\ - \\ 0.4 \\ - \\ 1.9 \\ 1.8 \\ 9.5$	0.6 - - 2.0 0.3	0.3 - 3.8 1.9	- - - 35.7 1.1		$1.0 \\ 2.1 \\ - \\ 1.4 \\ - \\ 0.5 \\ 4.6 \\ 12.4$	$ \begin{array}{r} 1.0\\ 2.1\\ -\\ 1.1\\ -\\ 0.4\\ 4.6\\ 12.4 \end{array} $
Sperm- whales	$\left\{\begin{array}{c}1936-37\\1937-38\\1938-39\\1939-40\\1940-41\\1941-42\\1942-43\\1943-44\\1944-45\\1945-46\end{array}\right.$	1.2 3.0 - - - - 4.4	0.5 7.6 0.4 3.2 - 3.5 - - 1.9	$\begin{array}{c} 3.1 \\ 1.2 \\ 0.9 \\ 4.1 \\ - \\ 0.6 \\ - \\ 9.3 \\ 0.9 \\ 0.5 \end{array}$	$1.6 \\ 0.8 \\ 1.5 \\ 1.2 \\ - \\ 5.5 \\ - \\ 5.7 \\ 3.6 \\ 1.7 \\$	$2.8 \\ -2.3 \\ 13.3 \\ -6.8 \\ 6.5 \\ 10.7 \\ 9.3 \\ 2.7 \\ $	$11.1 \\ 8.9 \\ 25.4 \\ 19.8 \\ - \\ 16.8 \\ 9.9 \\ 19.1 \\ 7.8 \\ 4.8 \\$	$5.2 \\ 3.7 \\ 39.5 \\ - \\ 26.2 \\ 1.1 \\ 14.0 \\ - \\ 18.5 \\ -$		$4.0 \\ 2.3 \\ 7.0 \\ 7.1 \\ - \\ 8.1 \\ 2.4 \\ 10.8 \\ 3.5 \\ 3.0 \\ $	$\begin{array}{c} 4.0\\ 2.3\\ 7.0\\ 7.1\\ 3.0\\ 7.7\\ 2.4\\ 10.5\\ 3.5\\ 3.0 \end{array}$
Sei- whales	$\left\{\begin{array}{l}1936-37\\1937-38\\1938-39\\1939-40\\1940-41\\1941-42\\1942-43\\1943-44\\1944-45\\1945-46\end{array}\right.$				$8.9 \\ - \\ 2.9 \\ - \\ 1.7 \\ - \\ 4.3 \\ - \\ 0.3$	$16.1 \\ 9.9 \\ - \\ 9.2 \\ - \\ 13.5 \\ 3.7 \\ 61.6 \\ 18.7 \\ 1.4$	$71.3 \\ 44.8 \\ 3.8 \\ 29.0 \\ -12.8 \\ 2.5 \\ 39.1 \\ 19.8 \\ 18.1 \\$	$87.0 \\ 29.0 \\ 15.8 \\ - \\ 4.9 \\ 63.0 \\ 0.8 \\ 11.9 \\ 21.7$	- - - 43.7 - 40.0 -	$26.7 \\ 8.2 \\ 1.1 \\ 6.7 \\ - \\ 5.3 \\ 7.3 \\ 19.7 \\ 5.8 \\ 4.3$	$26.7 \\ 8.2 \\ 1.1 \\ 6.7 \\ 10.1 \\ 3.7 \\ 7.3 \\ 20.5 \\ 5.8 \\ 4.3 \\ 1.1 \\ 1$

A	1935-	-36.	1936-	37.	1937-	-38.	1938-	39.	1939-	-40.	<u>+</u>	1941-	-42.	1942-	-43.	1943-	-44.	1944-	-45.	1945-	-46.
	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	i i	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.
Blue- whales.																					
Immature						-0 -0			07	04.00		0		0-		10	00.01		79 7 0		
males females		$53.97 \\ 56.79$		$\begin{array}{c} 71.19 \\ 64.52 \end{array}$		$\begin{array}{c} 73.53 \\ 80.95 \end{array}$		$\begin{array}{c} 44.90\\ 48.51 \end{array}$		84.09 79.55			$\begin{array}{c} 81.82\\ 86.67\end{array}$		$\begin{array}{c} 64.91 \\ 77.94 \end{array}$		$\begin{array}{c} 90.91 \\ 61.54 \end{array}$		$\begin{array}{c} 73.58 \\ 72.00 \end{array}$		$\begin{array}{c} 77.78 \\ 68.18 \end{array}$
animals		$\frac{50.19}{55.45}$		$\frac{64.52}{67.77}$		$\frac{30.35}{78.35}$		$\frac{10.01}{46.98}$		$\frac{10.00}{81.82}$			84.62		$\frac{7.01}{72.00}$		$\frac{01.01}{75.00}$		$\frac{12.00}{72.66}$		$\frac{00.10}{72.50}$
ammais		00.10	02	•	"	10.00	100	10.00		01.02				0.0							
Mature										1 - 01			10.10		07 00		0.00		00.40		
males		$\begin{array}{c} 46.03\\ 43.21 \end{array}$		28.81		$\begin{array}{c} 26.47 \\ 19.05 \end{array}$		$\begin{array}{c} 55.10 \\ 51.49 \end{array}$		$\begin{array}{c} 15.91 \\ 20.45 \end{array}$			$\begin{array}{c} 18.18\\ 13.33 \end{array}$		$\begin{array}{c} 35.09 \\ 22.06 \end{array}$		$\begin{array}{c}9.09\\38.46\end{array}$		$\begin{array}{c} 26.42\\ 28.00 \end{array}$		$22.22 \\ 31.82$
females		$\frac{43.21}{44.55}$	and the second s	$\frac{35.48}{32.23}$		$\frac{19.05}{21.65}$		$51.49 \\ 53.02$		$\frac{20.45}{18.18}$			$\frac{13.33}{15.38}$		$\frac{22.00}{28.00}$	A second second second second second	$\frac{33.40}{25.00}$		$\frac{20.00}{27.34}$		$\frac{51.62}{27.50}$
animals	044	44.00	39	32.23	21	21.00	120	99.0 4	10	10.10		4	10.00	- 55	20.00	0	20.00	00	21.01	22	21.00
Fin- whales.																					
Immature																		1.00			
males		40.15		42.61		37.89		30.72		46.22			$\begin{array}{c} 34.53 \\ 41.13 \end{array}$		$\begin{array}{c} 28.54 \\ 38.35 \end{array}$		$\begin{array}{c} 30.10\\ 35.83\end{array}$		$27.71 \\ 35.50$		20.59 23.57
females		$\frac{38.21}{20.22}$		$\frac{49.90}{46.00}$		$\frac{39.39}{20.00}$		$\frac{33.24}{22.00}$		$\frac{57.14}{51.44}$			$\frac{41.13}{37.80}$		$\frac{38.35}{32.99}$		$\frac{35.83}{32.78}$		$\frac{35.50}{31.71}$		$\frac{23.97}{21.91}$
animals	204	39.23	497	46.06	599	38.60	419	32.0 6	482	51.44	-	271	37.80	250	32.99	1/8	32.18	313	51.71	519	21.91
Mature																					
males		59.85		57.39		62.11		6 9. 2 8		53.78			65.47		71.46		69.90		72.29		79.41
females		61.79		50.10		60.61		66.76		42.86			58.87	1	61.65		64.17		$\frac{64.50}{200}$		$\frac{76.43}{2}$
animals	316	60.77	582	53.94	953	61.40	888	67.94	455	48.56		446	62.20	520	67.01	365	67.22	674	68.29	1,137	78.09

Table p.-South Georgia. Catch of immature and mature whales 1935/36-1945/46.

Years.	South Georgia.	Pelagic whaling.	Years.	South Georgia.	Pelagic whaling.
	Barrels ²)	Barrels ²)		Barrels	Barrels
$1924-25\ldots$	87.5	85.0	$1935 - 36 \dots$	95.5	101.6
$1925 - 26 \dots$	84.0	84.8	$1936 - 37 \dots$	104.5	111.7
$1926-27\ldots$	96.4	91.1	$1937 - 38 \dots$	95.7	111.1
$1927 - 28 \dots$	106.4	92.8	$1938 - 39 \dots$	117.6	107.1
$1928-29\ldots$	108.2	98.3	$1939 - 40 \dots$	106.1	117.2
1929–30	110.7	109.6	1940-41	109.1	105.8
$1930-31\ldots$	100.1	105.6	$1941 - 42 \dots$	110.1	-
$1931 - 32 \dots$	92.9	102.6	$1942-43\ldots$	95.2	
$1932 – 33 \dots$	86.5	114.6	1943-44	120.2	142.9
$1933 - 34 \dots$	91.8	111.9	$1944 - 45 \dots$	111.5	118.0
$1934 - 35 \dots$	105.1	102.2	$1945-46\ldots$	83.1	98.6

Table q.—Average production of oil per blue-whale unit.1)

¹) 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. ²) Barrel = $\frac{1}{6}$ ton. (1 ton = 1,016 kg.)

oil, whereas the 3 stations in 1945–46 produced only 78,877 barrels. This meagre result is mainly due to the fact that 2 of the stations commenced operations late.

Tables n and o on pages 20 and 21 give the monthly catch in absolute and percentage figures.

Table p on page 22 gives the proportion between immature and mature animals. As will be seen the percentage of immature blue-whales has been high during the war and in the first post-war season. For the fin-whales, however, the percentage of immature animals has decreased since 1941-42, and in the last season this decrease has been considerable.

The average size of whales killed off South Georgia is recorded in table g on page 15.

Table q above gives the average yield of oil per blue-whale unit from 1924–25 until and including 1945–46 in respect to South Georgia and pelagic whaling in the Antarctic. The figures in this table have been revised, as new, supplementary records have been sent in. These are now included in the table.

The output of oil in 1945–46 was remarkably low in respect to South Georgia as well as pelagic whaling. As far as South Georgia is concerned the yield is the lowest for the period covered by the table. As far as pelagic whaling is concerned it is neccessary to go as far back as to the season 1928–29 to find a lower yield. The whalers complained of the shortage of plancton and of emaciated whales, and this table fully proves this to be the fact.

Table r on next page gives a distribution of the Antarctic whaling results in respect to the various participating countries. The term country in this sense refers to the nation under whose flag operations have taken place.

Table s on page 25 shows the fluctuations in the whale oil price from 1932 to 1946.

The lowest oil price was quoted in 1934 and 1935, i.e. \pounds 8-10-0 per ton, and the top price in 1946, \pounds 70-0-0 per ton. The price has further increased in 1947, and a price of \pounds 100-0-0 per ton was obtained.

	All co	ountries.	Nor	way.	British	Empire.	Jaj	pan.	Gern	nany.	Pan	ama.	Oth	iers.
Years.	Number of whales.	Oil produc- tion.	Number of whales.	Oil produc- tion.	Number of whales.	Oil produc- tion.	Number of whales.	Oil produc- tion.	Number of whales.	Oil produc- tion.	Number of whales.	Oil produc- tion.	Number of whales.	Oil produc- tion.
		Barrels.1)		Barrels. ¹)		Barrels.1)		Barrels. ¹)		Barrels. ¹)		Barrels.1)		Barrels. ¹)
Absolute														
figures														
$1935 - 36 \dots$	30,991	$2,\!436,\!338$	14,421	1,116,033	12,538	995,167		44,145	-	-	2,449	205,801	944	75,192
1936 - 37	34,579	2,658,108		³) 1,158,665	12,361	977,822		156,587	920	61,992	2,389		1,911	121,547
$1937 - 38 \dots$	46,039	3,340,330	²) 14,960	³) 1,157,993	16,111			388,683	5,237	356,858	1,527	117,650	2,622	165,781
$1938 - 39 \dots$	38,356	2,820,771		$^{3})$ 842,712	11,192	891,791	7,540	483,476	5,066	374,149	907	68,853	2,130	159,790
$1939 - 40 \dots$	32,900	2,544,253	11,040	909,790	11,765	882,169		538,862	-	-	1,421	113,000	1,684	100,432
1940-41	16,363	1,100,008	2,387	203,317	3,116	229,780	9,992	622,413	-		-7	-	868	44,498
$1941 - 42 \dots$	1,425	77,819		-	359	17,012	-	-	-	-	-1	-	1,066	60,807
$1942 - 43 \dots$	998	50,960	-	-	-	-	-	-	-	-	-	-	998	50,960
$1943-44\ldots$	1,799	132,001	837	82,000	-	-	-	-	-	-	-]	-	962	50,001
$1944 - 45 \dots$	2,891	223,540	1,595	148,000	_	-	-	-	-	-	-	-	1,296	75,540
$1945 - 46 \dots$	13,387	818,652	7,246	520,873	5,059	252,751	-	-	-	-	-	-	1,082	45,028
Percentage														
figures	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1935-36	100.0	100.0	46.5	45.8	40.4	40.9	2.0	1.8	-	-	7.9	8.4	3.2	3.1
1936 - 37	100.0	100.0	43.5	43.6	35.7	36.8	5.7	5.9	2.7	2.3	6.9	6.8	5.5	4.6
1937 - 38	100.0	100.0	32.5	34.7	35.0	34.5	12.1	11.6	11.4	10.7	3.3	3.5	5.7	5.0
$1938 - 39 \dots$	100.0	100.0	30.0	29.9	29.2	31.6	19.7	17.1	13.2	13.3	2.4	2.4	5.5	5.7
$1939 - 40 \dots$	100.0	100.0	33.6	35.8	35.8	34.7	21.2	21.2	-	-	4.3	4.4	5.1	3.9
1940–41	100.0	100.0	14.6	18.5	19.0	20.9	61.1	56.6				_	5.3	4.0
$1941 - 42 \dots$	100.0	100.0	-	-	25.2	21.9	_			-	-	_	74.8	78.1
$1942 - 43 \dots$	100.0	100.0	-	_	-	-	_	-	-	-		-	100.0	100.0
$1943 - 44 \dots$	100.0	100.0	46.5	62.1	-	-	_	-	-	-	-	_	53.5	37.9
$1944 - 45 \dots$	100.0	100.0	55.2	66.2	_	-	_	-	-		-	-	44.8	33.8
$1945 - 46 \dots$	100.0	100.0	54.1	63.6	37.8	30.9					-	-	8.1	5.5

Table r.-Antarctic whaling results for the various countries 1935/36-1945/46. Absolute and percentage figures.

¹) Barrel = 1/6 ton (ton = 1,016 kg). ²) Including the catch of two Norwegian expeditions hired by Germany—in 1936-37 1,756 whales, in 1937-38 2,158 whales, and in 1938-39 1,658 whales. ^a) Including the production of two Norwegian expeditions hired by Germany—in 1936-37 134,200 barrels, in 1937-38 180,750 barrels, and in 1938-39 118,380 barrels.

Years.		Highest.	Lowest.
	-	£ sh.	£ sh.
1932	Naked	14. 10	10. —
1933	,,	15. 10	10. —
1934	"	12. —	8. 10
1935	"	20.5	8. 10
1936	,,	23. —	17.10
1937	,,	22. 10	17. —
1938	,,	17	12
1939	,,	15, 10	12
1940	,,	37. 10	23.10
1941	,,	39, 15	27.0
1942	"	37, 15	$ \frac{1}{37} $
1943	"	43. 5	42. 0
1944	,,	44. 15	44. 0
1945	,,	$\frac{44}{44}$, 15	44. 0
1946	"	70. 0	67. 10

Table s.-Whale oil No. I. Price per ton.

Table t.-Distribution of whaling crews by nationalities.

Season	Total	Norwegian	British	Japanese	German	Others
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 9,321 \\ 11,227 \\ 12,705 \\ 10,586 \\ 4,115 \end{array}$	7,678 7,615 7,517 6,270 3,398	$454 \\ 675 \\ 866 \\ 978 \\ 524$	837 1,840 2,793 2,965 —	255 886 1,386 	$97 \\ 211 \\ 143 \\ 373 \\ 193$

As will be seen from table t, above, 4.115 men were employed in the Antarctic whaling during the season 1945-46. Of these 3,398 were Norwegians, 524 British and 193 of other nationalities.

Name Plant Course Plant Plant Course and American Plant Plant Restart and

INTERNATIONAL AGREEMENTS FOR THE REGULATION OF WHALING

The International Whaling Conference Washington, D.C., November 20-December 2, 1946.

The International Whaling Conference 1946 took place in Washington D. C from the 20th of November to the 2nd of December 1946 inclusive.

We hereby give the contents of the final documents of the Conference, viz:

- 1. The Final Act.
- 2. The International Whaling Convention.
- 3. The International Whaling Protocol.

Final Act.

The Governments of Argentina, Australia, Brazil, Canada, Chile, Denmark, France, Netherlands, New Zealand, Norway, Peru, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, and the United States of America, represented by plenipotentiary delegations, and the Governments of Iceland, Ireland, Portugal, Sweden, and the Union of South Africa, represented by observer delegations.

Having accepted the invitation extended to them by the Government of the United States of America to participate in an International Whaling Conference.

Appointed their respective representatives, who are listed below by countries in the order of alphabetical precedence:

ARGENTINA

Delegates.

Oscar Ivanissevich, Ambassador to the United States—Chairman. José Manuel Moneta, Counselor. Commander Guillermo Brown, Naval Mission at Washington. Pedro H. Bruno Videla.

Adviser.

Martin Luis Drago, Argentine Embassy, Washington.

AUSTRALIA

Delegate.

Francis F. Anderson, Director, Fisheries Division, Departement of Commerce and Agriculture.

Member.

Cedric G. Setter, Research Officier, Fisheries Division, Department of Commerce and Agriculture.

BRAZIL

Delegate.

Paulo Fróes da Cruz, Agricultural Attaché, Brazilian Embassy, Washington.

CANADA

Delegates.

H. H. Wrong, Ambassador to the United States-Chairman.

H. A. Scott, Commercial Counselor, Canadian Embassy, Washington.

Technical Advisers.

J. A. Rodd, Department of Fisheries.

J. R. Dymond, Fisheries Research Board of Canada.

CHILE

Delegate.

Augustín R. Edwards.

DENMARK

Delegate.

Peter Friedrich Erichsen, Adviser on Fisheries of the Ministry of Agriculture and Fisheries—Chairman.

Adviser.

G. Mortensen, Trangisvaag, Faroe Isles.

FRANCE

Delegates.

Armand Anziani, Assistent director, Economic Affairs, Ministry of French Overseas Territories—Chairman.

Jean Joseph Le Gall, Director, Scientific and Technical Bureau, Maritime Fisheries.

Paul Budker, Assistant Director, Museum of Natural History.

Francis Lacoste, Minister Plenipotentiary, French Embassy, Washington. Henri Claudel, Attaché, French Embassy, Washington.

ICELAND

Observer.

Olafur Bjornsson, Secretary, Icelandic Legation, Washington.

IRELAND

Observer.

Thomas V. Commins, Commercial Attaché, Irish Legation, Washington.

NETHERLANDS

Delegates.

D. J. van Dijk, Head, Department of Fisheries, Ministry of Agriculture, Fisheries and Provisioning—Chairman.

H. S. Drost, Inspector, Fisheries.

G. G. H. von Felde, Attorney, Netherlands Whaling Corporation.

NEW ZEALAND

Delegate.

Guy Richardson Powles, First Secretary, New Zealand Legation, Washington.

Member.

Roger Hawthorne, New Zealand Legation, Washington.

NORWAY

Delegates.

Birger Bergersen, Minister to Sweden.

Knut Lykke, Counselor, Norwegian Embassy, Washington.

Hans Thomas Knudtzon, Chief of Section, Ministry of Commerce.

Valentin Voss, Attorney, Supreme Court of Norway.

Johan T. Ruud, Professor, University of Oslo.

Advisers.

H. Winge Sørensen, Director.

Ingvald Haugen, Member of the Norwegian Parliament.

Secretary.

Harald B. Paulsen, Director.

PERU

Delegate.

Rear Admiral Carlos Rotalde, Peruvian Navy.

Adviser.

Commander Guillermo Tirado, Peruvian Navy.

PORTUGAL

Observer.

Lieutnant Commander Jerónimo Henriques Jorge, Naval Attaché, Portuguese Embassy, Washington.

SWEDEN

Observers.

Leif de Belfrage, Commercial Counselor, Swedish Legation, Washington. Axel Hemmar, Member, Swedish Bar Association. Eric de Virgin, Attaché, Swedish Legation, Washington.

UNION OF SOUTH AFRICA

Observer.

Jacob Smit, Official, Union of South Africa Government Supply Office.

UNION OF SOVIET SOCIALIST REPUBLICS

Delegates.

Alexander S. Bogdanov, Ministry of Fisheries of the Union of Soviet Socialist Republics. Director, Research Institute of Fishing and Oceanography—Chairman.

Eugine I. Nikishin, Ministry of Fisheries of the Union of Soviet Socialist Republics.

Vladimir A. Tverianovich, Ministry of Fisheries of the Union of Soviet Socialist Republics.

Interpreter.

Galina F. Tsibulskaya.

UNITED KINGDOM

Delegates.

A. T. A. Dobson, Ministry of Agriculture and Fisheries-Chairman.

J. Thomson, Ministry of Agriculture and Fisheries.

N. A. Mackintosh, Director of Research, Discovery.

Committee.

E. Sykes, Dominions Office.

E. Melville, Colonial Office.

F. V. Cross, Ministry of Transport.

M. I. Hutton, Ministry of Food.

S. J. Knowles, Ministry of Food.

W. Templeman, Representative of the Commission of the Government of Newfoundland.

R. S. B. Best, British Embassy, Washington.

A. F. Geolot, British Embassy, Washington.

Adviser.

Captain H. K. Salvesen.

UNITED STATES

Delegates.

Remington Kellogg, Curator, Division of Mammals, Smithsonian Institution, ---Chairman. Ira N. Gabrielson, Consultant, Fish and Wildlife Service, Departement of the Interior.

William E. S. Flory, Acting Assistant Chief, International Resources Division, Departement of State.

Advisers.

H. J. Deason, Chief, Office of Foreign Activities, Fish and Wildlife Service, Department of the Interior.

L. Wendell Hayes, Specialist, Division of International Organization Affairs, Department of State.

Charles E. Lund, Chief, Foodstuffs Division, Commodities Branch, Office of International Trade, Department of Commerce.

Captain Harold C. Moore, Coordinator for Interdepartemental and International Affairs, United States Coast Guard.

Fred J. Rossiter, Acting Secretary, Fats, Oils and Seeds Committee, International Emergency Food Council, Department of Agriculture.

Adminitrative Assistant.

Edward Castleman, Divisional Assistant, Division of International Resources, Department of State.

The Conference met at Washington on November 20, 1946, under the Temporary Chairmanship of Remington Kellogg, Chairman of the Delegation of the United States of America.

At the opening session a motion was unanimously adopted to extend an invitation for officers of the Secretariat of the Food and Agriculture Organization of the United Nations to attend the Conference sessions and committee meetings as observers. The Attendance in this capacity of the officers nominated by the Organization, D. B. Finn, Harry Winsor and H. V. Knight, was approved by the Conference, on the recommendation of the Committee on Credentials.

With the approval of the President of the United States of America, Clarke L. Willard, Acting Chief of the Division of International Conferences, Department of State of the United States was designated as Secretary General of the Conference, and Donald J. Chaney, Chief Counsel, Fish and Wildlife Service, Department of the Interior of the United States, was designed Technical Secretary of the Conference.

Remington Kellogg, Chairman of the Delegation of the United States of America, was elected Permanent Chairman of the Conference at the second session, held on November 20, 1946, and Ira N. Gabrielson, Member of the Delegation of the United States of America, was elected Vice Chairman of the Conference at the same session.

The general committees established by the Rules of Produce adopted provisionally at the opening session were constituted by the Temporary Chairman as follows:

COMMITTEE ON CREDENTIALS

G. R. Powles (New Zealand)—Chairman.
A. R. Edwards (Chile).
P. F. Erichsen (Denmark).
Frances E. Pringle—Secretary.

COMMITTEE ON NOMINATIONS

A. T. A. Dobson (United Kingdom)—Chairman.
Olafur Bjornsson (Iceland).
Birger Bergersen (Norway).
William L. Breese—Secretary.

The following technical committees were appointed by the Chairman:

COMMITTEE ON NETHERLANDS PROPOSAL

A. T. A. Dobson (United Kingdom)—Chairman.
Francis F. Anderson (Australia).
D. J. van Dijk (Netherlands).
H. Th. Knudtzon (Norway).
William E. S. Flory (United States).
Donald J. Chaney—Secretary.

COMMITTEE ON DRAFTING

J. Thomson (United Kingdom)—Chairman.
A. R. Edwards (Chile).
Armand Anziani (France).
Paul Budker (France).
Jean J. Le Gall (France).
D. J. van Dijk (Netherlands).
G. R. Powles (New Zealand).
Knut Lykke (Norway).
H. Th. Knudtzon (Norway).
Valentin Voss (Norway).
R. S. B. Best (United Kingdom).
William E. S. Flory (United States).
H. J. Deason (United States).
Charles I. Bevans, W. R. Vallance—Secretaries.

COMMITTEE ON PENALTIES AND FORFEITURE

P. F. Erichsen (Denmark)—Chairman. José M. Moneta (Argentina). H. S. Drost (Netherlands).

G. G. H. von Felde (Netherlands).

H. Th. Knudtzon (Norway).

A. S. Bogdanov (Union of Soviet Socialist Republics).

V. A. Tverianovich (Union of Soviet Socialist Republics).

J. Thomson (United Kingdom).

F. V. Cross (United Kingdom).

Captain H. K. Salvesen (United Kingdom).

Ira N. Gabrielson (United States).

William E. S. Flory (United States).

Captain Harold C. Moore (United States).

W. R. Vallance-Secretary.

COMMITTEE ON BIOLOGICAL DATA

N. A. Mackintosh (United Kingdom)—Chairman. Pedro H. Bruno Videla (Argentina). Francis F. Anderson (Australia). Cedric G. Setter (Australia). A. R. Edwards (Chile). P. F. Erichsen (Denmark). Paul Budker (France). Jean J. Le Gall (France). G. R. Powles (New Zealand). H. S. Drost (Netherlands). Birger Bergersen (Norway). Johan T. Ruud (Norway). A. S. Bogdanov (Union of Soviet Socialist Republics). V. A. Tverianovich (Union of Soviet Socialist Republics). A. T. A. Dobson (United Kingdom). Captain H. K. Salvesen (United Kingdom). Remington Kellogg (United States). Mary F. Shreve—Secretary.

COMMITTEE ON REMUNERATION OF GUNNERS

D. J. van Dijk (Netherlands)-Chairman.

Francis F. Anderson (Australia).

P. F. Erichsen (Denmark).

G. G. H. von Felde (Netherlands).

H. Th. Knudtzon (Norway).

Ingvald Haugen (Norway).

V. A. Tverianovich (Union of Soviet Socialist Republics).

W. Templeman (United Kingdom).

Captain H. K. Salvesen (United Kingdom).

William E. S. Flory (United States). Captain Harold C. Moore (United States). Mary F. Shreve — Secretary.

COMMITTEE ON ESTABLISHMENT OF WHALING COMMISSION

A. T. A. Dobson (United Kingdom) - Chairman. Francis F. Anderson (Australia). Harry A. Scott (Canada). J. A. Rodd (Canada). P. F. Erichsen (Denmark). Armand Anziani (France). Jean J. Le Gall (France). D. J. van Dijk, (Netherlands). G. R. Powles (New Zealand). Knut Lykke (Norway). Ingvald Haugen (Norway). A. S. Bogdanov (Union of Soviet Socialist Republics). E. I. Nikishin (Union of Soviet Socialist Republics). V. A. Tverianovich (Union of Soviet Socialist Republics). A. F. Geolot (United Kingdom). William E. S. Flory (United States). L. Wendell Hayes (United States). W. R. Vallance — Secretary.

COMMITTEE ON USE OF SCIENTIFIC NAMES

Johan T. Ruud (Norway) — Chairman.
Paul Budker (France).
Jean J. Le Gall (France).
V. A. Tverianovich (Union of Soviet Socialist Republics).
N. A. Mackintosh (United Kingdom).
Remington Kellogg (United States).
Mary F. Shreve — Secretary.

COMMITTEE ON FACTORY SHIPS WITHIN TERRITORIAL WATERS

A. T. A. Dobson (United Kingdom) — Chairman.
Francis F. Anderson (Australia).
A. R. Edwards (Chile).
P. F. Erichsen (Denmark).
Armand Anziani (France).
Paul Budker (France).
Jean J. Le Gall (France).
Johan T. Ruud (Norway).
Admiral Carlos Rotalde (Peru).

V. A. Tverianovich (Union of Soviet Socialist Republics).

N. A. Mackintosh (United Kingdom).

- H. J. Deason (United States).
- W. R. Vallance Secretary.

The final session was held on December 2, 1946.

As a result of the deliberations of the Conference, the following instruments were formulated and opened for signature on December 2, 1946, to remain open for signature for fourteen days thereafter:

International Convention for the Regulation of Whaling.

Protocol for the Regulation of Whaling (hereinafter referred to as the Convention and the Protocol, respectively).

The following resolutions and recommendations were adopted:

Ι.

THE INTERNATIONAL WHALING CONFERENCE

Resolves:

1. To express its gratitude to the President of the United States of America, Harry S. Truman, for his initiative in convening the present Conference and for its preparation,

2. To express to its Chairman, Remington Kellogg, its deep appreciation for the admirable manner in which he has guided the Conference,

3. To express to the officers and staff of the Secretariat its appeciation for their untiring services and diligent efforts in contributing to the attainment of the objective of the Conference.

II.

The International Whaling Conference.

Resolves:

That the Government of the United States of America be authorized to publish the Final Act of this Conference, the text of the Convention and of the Protocol, and to make available for publication such additional documents in connection with the work of this Conference as in its judgment may be considered in the public interest.

III.

The International Whaling Conference.

Resolves:

That all signatory Governments should draw the attention of their inspectors and of the whaling companies operating under their jurisdiction to previous cases of taking baleen whales in the closed season on the pretext of providing fenders for the bunkering of whale catchers. The Conference desires to emphasize that this practice constitutes an infringement of paragraph 7 of the Schedule annexed to the Convention and recommends that if it is desired to send whale catchers long distances in the open sea before the commencement of or after the end of the whaling season, suitable arrangements must be made for bunkering them without the use of carcasses of baleen whales.

IV.

The International Whaling Conference

Recommends:

That the chart of Nomenclature of Whales annexed to this Final Act be accepted as a guide by the Governments represented at the Conference.

V.

The International Whaling Conference.

Recommends:

That the International Whaling Commission provided for in Article III of the Convention (hereinafter referred to as the Commission) should review the prohibition on the use of factory ships, or whale catchers attached thereto, for the purpose of taking humpback whales in any waters south of 40° South Latitude after taking into consideration the biological and other data available and consider the desirability of either the removal of the prohibition after the 1948—49 season and the southern winter season of 1949 or alternatively a limitation of the number of humpback whales to be taken both in the Antarctic and tropical areas.

VI.

The International Whaling Conference.

Recommends:

That the Commission should keep under constant review the question of the limits of the Antarctic whaling season and also the maximum number of blue whale units as defined by paragraph 8 (b) of the Schedule permitted to be taken during the season.

VII.

The International Whaling Conference

Considers:

That the conditions relating to the use of factory ships within territorial waters of Contracting Governments as provided by paragraph 17 of the Schedule should be kept under review by the Commission so as to insure that the operations are conducted on an economic basis.

VIII.

The International Whaling Conference

Recommends:

That when adequate information becomes available concerning the migration routes and seasons in localities where land stations are maintained and operated, specific annual open periods for whaling should be prescribed instead of the regulation included in the Schedule as paragraph 10. It is the view of the Conference that the Commission should endeavour to obtain at the earliest possible time scientific information as a basis for prescribing specific seasons during which land stations shall be permitted to operate in the various areas.

IX.

At the request of the Delegation of the Union of Soviet Socialist Republics the following statements are included:

1. Owing to unforeseen circumstances the Soviet factory ship will be unable to reach the whaling grounds by the commencement of the 1946–47 season in waters south of 40° South Latitude. Accordingly the Delegation of the Union of Soviet Socialist Republics requests that this ship be permitted to operate with a full complement of catchers for a continuous period of four months from the date on which it is able to commence operations in that area. Note is made that a similar concession was made to other Governments for the season 1945–46.

2. The Delegation of the Union of Soviet Socialist Republics also requests that the factory ship be permitted to conduct operations in that area for the fourmonth period during the season 1946–47 without regard to the sixteen thousand blue-whale unit catch limitation.

The Conference supports these request and considers them justified in the special circumstances. It is understood that support by the Conference of these requests shall not be regarded as a precedent for future seasons.

X. The International Whaling Conference

Supports:

and considers justified the request of the Delegation of the Union of Soviet Socialist Republics that the taking of gray whales in the Bering and Chukotsk seas should be permitted when the meat and products of such whales are to be used exclusively for local consumption by the aborigines of the Chukotsk and Korjaksk areas.

XI.

The International Whaling Conference

Recognizes:

The desirability of achieving a large measure of uniformity among the various Contracting Governments with respect to the nature and severity of penalties imposed, for contraventions of the Convention, upon persons or ships operating under their jurisdiction. It recognizes that even under the most favorable management and with the most conscientious and experienced gunners and crews, it is inevitable that some whales will be taken illegally and that a certain latitude should be allowed in assessing penalties for such unavoidable taking. It may be that legal and administrative differences among the Contracting Governments will prevent the adoption of a uniform system of penalties, but it is the view of the Conference that it is desirable that the Governments should provide for the imposition of penalties sufficiently severe to discourage the illegal killing or taking of whales.

The Conference accordingly recommends that the Commission should study the reports regarding infractions made to them in accordance with the provisions of Article IX, 4, of the Convention with a view to making recommendations to Governments as provided for in Article VI of the Convention for the purpose of achieving the greatest possible uniformity in the penalties imposed for contraventions of the Convention.

In Witness whereof, the following representatives sign this Final Act.

Done in Washington, this second day of December 1946, in the English language, the original of which shall be deposited in the archives of the Government of the United States of America. The Government of the United States of America shall transmit certified copies thereof to all the other Governments represented at the Conference.

FOR ARGENTINA:	
Oscar Ivanissevich.	Guillermo Brown.
José Manuel Moneta.	Pedro H. Bruno Videla.
FOR AUSTRALIA:	
Francis F. Anderson.	Cedric G. Setter.
FOR BRAZIL:	
Paulo Fróes da Cruz.	
FOR CANADA:	
H. A. Scott.	J. A. Rodd.
FOR CHILE:	
Augustín R. Edwards.	
FOR DENMARK:	
Peter Friedrich Erichsen.	
FOR FRANCE:	
Francis Lacoste.	Henri Claudel.

FOR THE NETHERLANDS:	
D. J. van Dijk.	$H.$ λ
G. G. H. von Felde.	
FOR NEW ZEALAND:	
Guy Richardson Powles.	Roge
FOR NORWAY:	
Birger Bergersen.	Joh
Knut Lykke.	H.
H. Th. Knudtzon.	Har

H. S. Drost.

Roger Hawthorne.

Johan T. Ruud. H. Winge Sørensen. Harald B. Paulsen.

FOR PERU:

Carlos Rotalde.

Valentin Voss.

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:

Alexander S. Bogdanov. Eugine I. Nikishin. Vladimir A. Tverianovich.

FOR THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND:

A. T. A. Dobson.	S. J. Knowles.
J. Thomson.	M. I. Hutton.
N. A. Mackintosh.	R. S. B. Best.
F. V. Cross.	A. F. Geolot.

FOR THE UNITED STATES OF AMERICA:

Remington Kellogg.	H. J. Deason.
Ira N. Gabrielson.	Harold C. Moore.
William E. S. Flory.	L. Wendell Hayes.

Observers:

FOR ICELAND: Olafur Bjørnsson.

FOR IRELAND: Thomas V. Commins.

FOR PORTUGAL: Jerónimo Henriques Jorge.

FOR SWEDEN: Leif de Belfrage.

Eric de Virgin.

FOR THE UNION OF SOUTH AFRICA: Jacob Smit.

Addendum.

As a result of the discussion of certain matters raised at the Conference the Netherlands Delegate invited the Conference to include in its Final Act a resolution in the following terms:

"The Conference recommends that in the interest of effective conservation and development of whale stocks the Governments represented at the Conference refrain from taking any measures which might prevent any country adhering to the principles of the international whaling agreements from ratifying or entering into the international regulations for the preservation of whale stocks."

This resolution was, however, defeated by nine votes to three, some delegates disagreeing with the substance of the resolution and others considering that it contained implications outside the purview of the Conference. At the express request of the Netherlands Delegate these facts are recorded in this addendum to the Final Act.

International Convention for the Regulation of whaling.

The Governments whose duly authorized representatives have subscribed hereto

Recognizing the interest of the nations of the world in safeguarding for future generations the great natural resources represented by the whale stocks.

Considering that the history of whaling has seen overfishing of one area after another and of one species of whale after another to such a degree that it is essential to protect all species of whales from further overfishing.

Recognizing that the whale stocks are susceptible of natural increases if whaling is properly regulated, and that increases in the size of whale stocks will permit increases in the numbers of whales which may be captured without endangering this natural resources.

Recognizing that it is in the common interest to achieve the optium level of whale stocks as rapidly as possible without causing wide-spread economic and nutritional distress.

Recognizing that in the course of achieving these objectives, whaling operations should be confined to those species best able to sustain exploitation in order to give an interval for recovery to certain species of whales now depleted in numbers.

Desiring to establish a system of international regulation for the whale fisheries to ensure proper and effective conservation and development of whale stocks on the basis of the principles embodied in the provisions of the International Agreement for the Regulation of Whaling signed in London on June 8, 1937, and the protocols to that Agreement signed in London on June 24, 1938, and November 26, 1945 and

Having decided to conclude a convention to provide for he proper conservation of whale stocks and thus make possible the orderly development of the whaling industry,

Have agreed as follows:

Article I.

1. This Convention includes the Schedule attached thereto which forms an integral part thereof. All references to "Conventions" shall be understood as including the said schedule either in its present terms or as amended in accordance with the provisions of Article V.

2. This Convention applies to factory ships, land stations, and whale catchers under the jurisdiction of the Contracting Governments, and to all waters in which whaling is prosecuted by such factory ships, land stations, and whale catchers.

Article II.

As used in this Convention.

1. "factory ship" means a ship in which or on which whales are treated whether wholly or in part,

2. "land station" means a factory on the land at which whales are treated whether wholly or in part,

3. "whale catcher" means a ship used for the purpose of hunting, taking, towing, holding on to, or scouting for whales,

4. "Contracting Government" means any Government which has deposited an instrument of ratification or has given notice of adherence to this Convention.

Article III.

1. The Contracting Governments agree to establish an International Whaling Commission, hereinafter referred to as the Commission, to be composed of one member from each Contracting Government. Each member shall have one vote and may be accompanied by one or more experts and advisers.

2. The Commission shall elect from its own nembers a Chairman and Vice Chairman and shall determine its own Rules of Procedure. Decisions of the Commission shall be taken by a simple majority of those members voting except that a three-fourths majority of those members voting shall be required for action in pursuance of Article V. The Rules of Procedure may provide for decisions otherwise than at meetings of the Commission.

3. The Commission may appoint its own Secretary and staff.

4. The Commission may set up, from among its own members and experts or advisers, such committees as it considers desirable to perform such functions as it may authorize.

5. The expenses of each member of the Commission and of his experts and advisers shall be determined and paid by his own Government.

6. Recognizing that specialized agencies related to the United Nations will be concerned with the conservation and development of whale fisheries and the products arising therefrom and desiring to avoid duplication of functions, the Contracting Governments will consult among themselves within two years after the coming into force of this Convention to decide whether the Commission shall be brought within the framework of a spesialized agency related to the United Nations.

7. In the meantime the Government of the United Kingdom of Great Britain and Northern Ireland shall arrange, in consultation with the other Contracting Governments, to convene the first meeting of the Commission, and shall intiate the consultation referred to in paragraph 6 above.

8. Subsequent meetings of the Commission shall be convened as the Commission may determine.

Article IV.

1. The Commission may either in collaboration with or through independent agencies of the Contracting Governments or other public or private agencies, establishments, or organizations, or independently

(a) encourage, recommend, or if necessary, organize studies and investigations relating to whales and whaling,

(b) collect and analyze statistical information concerning the current condition and trend of the whale stocks and the effects of whaling activities thereon,

(c) study, appraise, and disseminate information concerning methods of maintaining and increasing the population of whale stocks.

2. The Commission shall arrange for the publication of reports of its activities, and it may publish independently or in collaboration with the International Bureau for Whaling Statistics at Sandefjord in Norway and other organizations and agencies such reports as it deems appropriate, as well as statistical, scientific, and other pertinent information relating to whales and whaling.

Article V.

1. The Commission may amend from time to time the provisions of the Schedule by adopting regulations with respect to the conservation and utilization of whales resources fixing (a) protected and unprotected species, (b) open and closed seasons, (c) open and closed waters, including the designation of sanctuary areas, (d) size limits for each species, (e) time, methods and intensity of whaling (including the maximum catch of whales to be taken in any one season) (f) types and specifications of gear and apparatus and appliances which may be used, (g) methods of measurement, and (h) catch returns and other statistical and biological records.

2. These amendments of the Schedule (a) shall be such as are necessary to carry out the objectives and purposes of this Convention and to provide for the conservation, developments and optimum utilization of the whale resources, (b) shall be based on scientific findings, (c) shall not involve restrictions on the number or nationality of factory ships or land stations, nor allocate specific quotas to any factory ship or land station or to any group or factory ships or land stations, and (d) shall take into consideration the interests of the consumers of whale products and the whaling industry.

3. Each of such amendments shall become effective with respect to the Contracting Governments ninety days following notification of the amendment by the Commission to each of the Contracting Governments, except that (a) if any Government presents to the Commission objection to any amendment prior to the expiration of this ninety-day period, the amendment shall not become effective with respect to any of the Governments for an additional ninety days; (b) thereupon, any other Contracting Government may present objection to the amendment at any time prior to the expiration of the additional ninetyday period, or before the expiration of thirty days from the date of receipt of the last objection received during such additional ninety-day period, which ever date shall be later, and (c) thereafter, the amendment shall become effective with respect to all Contracting Governments which have not presented objection but shall not become effective with respect to any Government which has so objected until such date as the objection is withdrawn. The Commission shall notify each Contracting Government immediately upon receipt of each objection and withdrawal and each Contracting Government shall acknowledge receipt of all notifications of amendments, objections, and withdrawals.

4. No amendments shall become effective before July 1, 1949.

Article VI.

The Commission may from time to time make recommendations to any or all Contracting Governments on any matters which relate to whales or whaling and to the objectives and purposes of this Convention.

Article VII.

The Contracting Governments shall ensure prompt transmission to the International Bureau for Whaling Statistics at Sandefjord in Norway, or to such other body as the Commission may designate, of notifications and statistical and other information required by this Convention in such form and manner as may be prescribed by the Commission.

Article VIII.

1. Notwithstanding anything contained in this Convention, any Contracting Government may grant to any of its nationals a special permit authorizing that national to kill, take and treat whales for purpose of scientific research subject to such restrictions as to number and subjects to such other conditions as the Contracting Government thinks fit, and the killing, taking, and treating of whales in accordance with the provisions of this Article shall be exempt from the operation of this Convention. Each Contracting Government shall report at once to the Commission all such authorizations which is has granted. Each Contracting Government may at any time revoke any such special permit which it has granted.

2. Any whales taken under these special permits shall so far as practicable be processed and the proceeds shall be dealt with in accordance with directions issued by the Government by which the permit was granted.

3. Each Contracting Government shall transmit to such body as may be designated by the Commission, insofar as practicable, and at intervals of not more than one year, scientific information available to that Government with respect to whales and whaling, including the results of research conducted pursuant to paragraph 1 of this Article and to Article IV.

4. Recognizing that continous collection and analysis of biological data in connection with the operations of factory ships and land stations are indispensable to sound and constructive management of the whale fisheries, the Contracting Governments will take all practiable measures to obtain such data.

Article IX.

1. Each Contracting Government shall take appropriate measures to ensure the application of the provisions of this Convention and the punishment of infractions against the said provisions in operations carried out by persons or by vessels under its jurisdiction.

2. No bonus or other remuneration calculated with relation to the results of their work shall be paid to the gunners and crews of whale catchers in respect of any whales the taking of which is forbidden by this Convention.

3. Prosecution for infractions against or contraventions of this Convention shall be instituted by the Government having jurisdiction over the offense.

4. Each Contracting Government shall transmit to the Commission full details of each infraction of the provisions of this Convention by persons or vessels under the jurisdiction of that Government as reported by its inspectors. This information shall include a statement of measures taken for dealing with the infraction and of penalties imposed.

Article X.

1. This Convention shall be ratified and the instruments of ratification shall be deposited with the Government of the United States of America.

2. Any Government which has not signed this Convention may adhere thereto after it enters into force by a notification in writting to the Government of the United States of America. 3. The Government of the United States of America shall inform all other signatory Governments and all adhering Governments of all ratifications deposited and adherences received.

4. This Convention shall, when instruments of ratification have been deposited by at least six signatory Governments, which shall include the Governments of the Netherlands, Norway, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, enter into force with respect to those Governments and shall enter into force with respect to each Government which subsequently ratifies or adheres on the date of deposit of its instruments of ratification or the receipt of its notification of adherence.

5. The provisions of the Schedule shall not apply prior to July 1, 1948. Amendments to the Schedule adopted pursuant to Article V shall not apply prior to July 1, 1949.

Article XI.

Any Contracting Government may withdraw from this Convention on June thirty of any year by giving notice on or before January first of the same year to the depositary Government, which upon receipt of such a notice shall at once communicate it to the other Contracting Governments. Any other Contracting Government may, in like manner, within one month of the receipt of a copy of such a notice from the depositary Government, give notice of the withdrawal, so that the Convention shall cease to be in force on June thirtieth of the same year with respect to the Government giving such notice of withdrawal.

This Convention shall bear the date on which it is opened for signature and shall remain open for signature for a period of fourteen days thereafter.

In Witness whereof the undersigned, being duly authorized, have signed this Convention.

Done in Washington this second day of December, 1946, in the English language, the original of which shall be deposited in the archives of the Government of the United States of America. The Government of the United States of America shall transmit certified copies thereof to all the other signatory and adhering Governments.

FOR ARGENTINA: Oscar Ivanissevich. José Manuel Moneta.

Guillermo Brown. Pedro H. Bruno Videla.

FOR AUSTRALIA: Francis F. Anderson.

FOR BRAZIL: Paulo Fróes da Cruz. FOR CANADA: H. H. Wrong.

H. A. Scott.

FOR CHILE: Augustín R. Edwards.

FOR DENMARK: Peter Friedrich Erichsen.

FOR FRANCE: Francis Lacoste.

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- FOR THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND: A. T. A. Dobson. J. Thomson.
 - FOR THE UNITED STATES OF AMERICA: Remington Kellogg. William E. S. Flory. Ira N. Gabrielson.

FOR THE UNION OF SOUTH AFRICA: H. T. Andrews.

Schedule.

- 1. (a) There shall be maintained on each factory ship at least two inspectors of whaling for the purpose of maintaining twenty-four hour inspection. These inspectors shall be appointed and paid by the Government having jurisdiction over the factory ship.
 - (b) Adequate inspection shall be maintained at each land station. The inspectors serving at each land station shall be appointed and paid by the Government having jurisdiction over the land station.

- 2. It is forbidden to take or kill gray whales or right whales, except when the meat and products of such whales are to be used exclusively for local consumption by the aborigines.
- 3. It is forbidden to take or kill calves or suckling whales or female whales which are accompained by calves or suckling whales.
- 4. It is forbidden to use a factory ship or a whale catcher attached thereto for the purpose of taking or treating baleen whales in any of the following areas:
 - (a) in the waters north of 66° North Latitude except that from 150° East Longitude eastwards as far as 140° West Longitude the taking or killing of baleen whales by a factory ship or whale catcher shall be permitted between 66° North Latitude and 72° North Latitude,
 - (b) in the Atlantic Ocean and its dependent waters north of 40° South Latitude,
 - (c) in the Pacific Ocean and its dependent waters east of 150° West Longitude between 40° South Latitude and 35° North Latitude,
 - (d) in the Pacific Ocean and its dependent waters west of 150° West Longitude between 40° South Latitude and 20° North Latitude,
 - (e) in the Indian Ocean and its dependent waters north of 40° South Latitude.
- 5. It is forbidden ot use a factory ship or a whale catcher attached thereto for the purpose of taking or treating baleen whales in the waters south of 40° South Latitude from 70° West Longitude westward as far as 160° West Longitude.
- 6. It is forbidden to use a factory ship or a whale catcher attached thereto for the purpose of taking or treating humpback whales in any waters south of 40° South Latitude.
- 7. (a) It is forbidden to use a factory ship or a whale catcher attached thereto for the purpose of taking or treating baleen whales in any waters south of 40° South Latitude, except during the period from December 15 to April 1 following, both days inclusive.
 - (b) Notwithstanding the above prohibition of treatment during a closed season, the treatment of whales which have been taken during the open season may be completed after the end of the open season.
- 8. (a) The number of baleen whales taken during the open season caught in any waters south of 40° South Latitude by whale catchers attached to factory ships under the jurisdiction of the Contracting Governments shall not exceed sixteen thousand blue-whale units.
 - (b) For the purposes of subparagraph (a) of this paragraph blue-whale units shall be calculated on the basis that one blue-whale equals:
 - (1) two fin whales or
 - (2) two and a half humpback whales or
 - (3) six sei whales

- (c) Notification shall be given in accordance with the provisions of Article VII of the Convention, within two days after the end of each calendar week, of data on the number of blue-whale units taken in any waters south of 40° South Latitude by all whale catchers attached to factory ships under the jurisdiction of each Contracting Government.
- (d) If it should appear that the maximum catch of whales permitted by subparagraph (a) of this paragraph may be reached before April 1 of any year, the Commission, or such other body as the commission may designate, shall determine, on the basis of the data provided, the date on which the maximum catch of whales shall be deemed to have been reached and shall notify each Contracting Government of that date not less than two weeks in advance thereof. The taking of baleen whales by whale catchers attached to factory ships shall be illegal in any waters south of 40° South Latitude after the date so determined.
- (e) Notification shall be given in accordance with the provisions of Article VII of the Convention of each factory ship intending to engage in whaling operations in any waters south of 40° South Latitude.
- 9. It is forbidden to take or kill any blue, fin, sei, humpback, or sperm whales below the following lengths:

(a)	Blue whales	70 feet (21.3	meters)
(b)	Fin whales	55 feet (16.8	meters)
(c)	Sei whales	40 feet (12.2	meters)
(d)	Humpback whales	35 feet (10.7	meters)
(e)	Sperm whales	35 feet (10.7	meters)

except that blue whale of not less than 65 feet (19.8 meters), fin whales of not less than 50 feet (15.2 meters), and sei whales of not less than 35 feet (10.7 meters) in lenght may be taken for delivery to land stations provided that the meat of such whales is to be used for local consumption as human or animal food.

Whales must be measured when at rest on deck or platform, as accurately as possible by means of a steel tape measure fitted at the zero end with a spiked handle which can be stuck into the deck planking abreast of one end of the whale. The tape measure shall be stretched in a straight line parallel with the whale's body and read abreast the other end of the whale. The ends of the whale, for measurements purposes, shall be the point of the upper jaw and the notch between the tail flukes. Measurements, after being accurately read on the tape measure, shall be logged to the nearest foot, that is to say, any whale between 75' 6" and 76' 6" shall be logged at 77'. The measurement of any whale which falls on an exact half foot shall be logged at the next half foot, e. g. 76' 6" precisely, shall be logged as 77'.

- 10. It is forbidden to use a land station or a whale catcher attached thereto for the purpose of taking or treating baleen whales in any area or in any waters for more than six months in any period of twelve months, such period of six months to be continuous.
- 11. It is forbidden to use a factory ship which has been used during a season in any waters south of 40° South Latitude for the purpose of treating baleen whales, in any other area for the same purpose within a period of one year from the termination of that season.
- 12. (a) All whales taken shall be delivered to the factory ship or land station and all parts of such whales shall be processed by boiling or otherwise, except the internal organs, whale bone and flippers of all whales, the meat of sperm whales and of parts of whales intended for human food or feeding animals.
 - (b) Complete treatment of the carcasses of "Dauhval" and of whales used as fenders will not be required in cases where the meat or bone of such whales is in bad condition.

13. The taking of whales for delivery to a factory ship shall be so regulated or restricted by the master or person in charge of the factory ship that no whale carcass (except of a whale used as a fender) shall remain in the sea for a longer period than thirty-three hours from the time of killing to the time when it is taken up on to the deck of the factory ship for treatment. All whale catchers engaged in taking whales must report by radio to the factory ship the time when each whale is caught.

14. Gunners and crews of factory ships, land stations, and whale catchers, shall be engaged on such terms that their remuneration shall depend to a considerable extent upon such factors as the species, size, and yield of whales taken and not merely upon the number of the whales taken. No bonus or other remuneration shall be paid to the gunners or crews of whale catchers in respect of the taking of milk-filled or lactating whales.

15. Copies of all official laws, and regulations relating to whales and whaling and changes in such laws and regulations shall be transmitted to the Commission.

16. Notification shall be given in accordance with the provisions of Article VII of the Convention with regard to all factory ships and land stations of statistical information (a) concerning the number of whales of each species taken, the number thereof lost, and the number treated at each factory ship or land station, and (b) as to the aggregate amounts of oil of each grade and quantities of meal, fertilizer (guano), and other products derived from them, together with (c) particulars with respect to each whale treated in the factory ship or land station as to the date and approximate latitude and longitude of taking the species and sex of the whale, its length and, if it contains a foetus, the length and sex, if ascertainable, of the foetus. The data referred to in (a) and (c) above shall be verified at the time of the tally and there shall also be notification to the Commission of any information which may be collected or obtained concerning the calving grounds and migration routes of whales.

- In communicating this information there shall be specified: (a) the name and gross tonnage of each factory ship,
- (b) the number and aggregate gross tonnage of the whale catchers,

49

(c) a list of the land stations which were in operation during the period concerned.

17. Notwithstanding the definition of land station contained in Article II of the Convention, a factory ship operating under the jurisdiction of a Contracting Government and the movements of which are confined solely to the territorial waters of that Government shall be subject to the regulations governing the operation of land stations within the following areas:

- (a) on the coast of Madagascar and its dependencies and on the west coasts of French Africa,
- (b) on the west coast of Australia in the area known as Shark Bay and northward to Northwest Cape and including Exmouth Gulf and King George's Sound, including the port of Albany, and on the east coast of Australia in Twofold Bay and Jervis Bay.

18. The following expressions have the meanings respectively assigned to them, that is to say:

"baleen" whale means any whale other than toothed whale,

"blue whale" means any whale known by the name of blue whale, Sibbald's rorqual, or sulphur bottom,

"fin whale" means any whale known by the name of common finback, common rorqual, finback, finner, fin whale, herring whale, razorback, or true fin whale,

"sei whale" means any whale known by the name of *Balaenoptera borsalis*, sei whale, Rudolphi's rorqual, pollack whale, or coalfish whale, and shall be taken to include *Balaenoptera brydei* Bryde's whale,

"gray whale" means any whale kown by the name of gray whale, California gray, devil fish, hard head, mussel digger, gray back, rip sack, "humpback whale" means any whale known by the name of bunch, humpback, humpback whale, humpbacked whale, hump whale or hunchbacked whale,

"right whale" means any whale known by the name of Atlantic right whale, Arctic right whale, Biscayan right whale, bowhead, great polar whale, Greenland right whale, Greenland whale, Nordkaper, North Atlantic right whale, North Cape whale, Pacific right whale, pigmy right whale, Southern pigmy right whale, or Southern right whale, "sperm whale" means any whale known by the name of sperm whale, spermacet whale, cachalot, or pot whale,

"Dauhval" means any unclaimed dead whale found floating.

Protocol for the Regulation of whaling.

The Governments whose duly authorized representatives have subscribed hereto,

Recognizing the necessity of an early decision regarding the regulations to be made applicable to the whaling season of 1947-48,

Having due regard both to world shortage of oil and fats and to the necessity for the conservation of the whale stocks,

Agree as follows:

Article I.

All the provisions of the Protocol for the Regulation of whaling signed in London on November 26, 1945, shall be made applicable as if in the said Protocol the words "season 1947–48" were substituted for the words "season 1946–47" and the words "1 May 1948 to 31 October 1948" were substituted for the words "1st May, 1947, to 31st October, 1947".

Article II.

This Protocol shall come into force when notifications of acceptance thereof shall have been given to the Government of the United States of America by all the Governments parties to the Protocol of November 26, 1945.

This Protocol shall bear the date on which it is opened for signature and shall remain open for signature for a period of fourteen days thereafter.

In Witness whereof the undersigned, being duly authorized, have signed this Protocol.

Done in Washington this second day of December, 1946, in the English language, the original of which shall be deposited in the archives of the Government of the United States of America. The Government of the United States of America shall transmit certified copies thereof to all the other signatory and adhering Governments.

FOR ARGENTINA:

Oscar Ivanissevich. José Manuel Moneta. Guillermo Brown. Pedro H. Bruno Videla.

FOR AUSTRALIA: Francis F. Anderson

FOR BRAZIL: Paulo Fróes da Cruz.

FOR CANADA: H. H. Wrong.

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FOR THE UNITED STATES OF AMERICA: Remington Kellogg. William E. S. Flory. Ira N. Gabrielson.

FOR THE UNION OF SOUTH AFRICA: H. T. Andrews.

Annex.	Nomenclature

		Annex. Nomenciature
Scientific	English	French
Balaenidae (Right Whales) Balaena mysticetus Linna- eus	Greenland Whale	Baleine franche
	Right Whale Bowhead Arctic Whale	Baleine du Groenland
Eubalaena glacialis Bonnaterre Eubalaena japonica lacépede Eubalaena australis Desmoulins	Great Polar Whale Right Whale Biscayan Right Whale North Atlantic Right Whale Nordcaper North Cape Whale Scrag Whale Black Whale Black Right Whale	Baleine de Biscaye
Neobalaena marganita Gray	Southern Right Whale Pigmy Right Whale	Baleine franche naine
Balaenopteridae (Furrow-throated Whales) Megaptera nodosa	Hump Whale	Mégaptêre Jubarte
Bonnaterre Megaptera Novae Angliae Borowski	Humpbacked Whale Humpback Hunchbacked Whale Bunch	Mcgapiero Jaoarte
Balaenoptera (Sibbaldus) musculus Linnaeus	Sibbald's Rorqual Blue Whale Sulphur Bottom Great Northern	Baleine bleue Rorqual bleu
Balaenoptera physalus Linnaeus	Rorqual Fin Whale	Rorqual commun
	Finner Common Finback Herring Whale Razorback Common Rorqual	
Balaenoptera borealis Lesson	Sei Whale Pollack Whale Coalfish Whale	Rorqual de Rudolf
Balaenoptera Brydei olsen	Rudolphi's Rorqual Bryde's Whale Sei Whale	Baleine de Bryde
Balaenoptera acutorostrata Lacépede	Lesser Rorqual-Minke Little Piked Whale Pike-headed Whale	Petit Rorqual
Rhachianectidae Rhachianectes glaucus Cope	Gray Whale Gray Rack Californ. Gray Whale Pacific Gray Whale Devil Fish Hard Head Mussel Digger Rip Sack	Baleine grise
Physeteridae Physeter Catadon Linnaeus	Sperm Whale Pot Whale Cachalot	Cachalot
Ziphiidae Hyperoodon ampullatus Hyperoodon planifrons D — Danish N — N	Bottlenose (Arctic) Bottlenose (Antarctic)	

D — Danish N — Norwegian S — Swedish

of Whales.

Dutch	Russian	Scandinavian	Spanish	
Gröenland Walvish	Grenlandskii kit	Grønlandshval Sletbak Nordhval Grønlandshval	(N) (N) (D) (S)	Cabeza arqueada
Noordkaper	Nastoiashchii kit Severo-Atlanticheskii Nastoiashchii kit	Nordhval Rethval Nordkaper Biscayerhval Nordkapari Biscayahval	(S) (D.N.) (N) (S) (S)	Ballena franca
Dwerg Walvisch				Enana
Bultrug	Gorbatyi kit Gorbach	Knølhval Bukkelhval Knølhval Puckelval	(N) (D) (S) (S)	Jorobada
Blauwe Vinvisch	Sinii kit Bluhval	Blåhval Blåhval	(D.N.) (S)	Ballena Azul
Gewone Vinvisch	Seldianoi kit	Finhval	(D.N.)	Ballena de aleta
	Finhval	Rørhval Sillhval	(D) (S)	
Noordsche Vinvisch	Seihval	Seihval Seival	(D.N.) (S)	Ballena Boba
Bryde Vinvisch		Brydehval	(N)	Ballena
Dwerg Vinvisch	Malyi polosatik kit zalivov	Minke Vågehval Vikhval	(N) (D.N.) (S)	Brydea Ballena pequena
Gryze Walvisch	Seryi kit	Gråhval Gråval	(N) (S)	Ballena gris
Potvisch	Kashalot	Spermacetihval Spermhval	0.N.S.) (S) (N)	Cachalote
Snavel Potvisch	Butylkonos	Pottval Nabbväl Bottlenose	(S) (N)	Hocico de botells

		Sne	cies of w	hales car	oht.			Expeditions.			
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	
South Georgia	80	1,456	238	82	57	1,913	$\begin{array}{r} \text{Barrel} = \\ \frac{1}{6} \text{ ton.} \\ 1 \end{array} \\ 78,877 \end{array}$	3	_	16	
Antarctic, pelagic whaling	3,526	7,729		3	216	11,474	739,775	-	9	77	
Total	3,606	9,185	238	85	273	13,387	818,652	3	9	93	

Table No. I.-Whaling in the Antarctic in the season 1945/46.

¹) 1 ton = 1,016 kg.

Table No. 2.—Whaling results for the various countries in the Antarctic in the season 1945/46.

	Spe	cies of w	hales car	ight.			Expeditions.		
Blue.	Fin.	Hump- back.	Sei.	Sperm.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
						$\begin{array}{l} \text{Barrel} = \\ {}^{1}\!/_{6} \text{ton.} \end{array}$			
6	400	46	26	3	481	19,345	1	-	5
3,084	3,645			36	6,765	501,528		6	44
	<i>,</i>				,	,			
26	280	11	22	11	. 350	14,504	1	_	5
442	4.084	_		180	4.709	238.247		3	33
	,		-		, .	,			
48	776	181	34	43	1,082	45,028	1	-	6

3,606	9,185	238	85	273	13,387	$818,\!652$	3	9	93
	6 3,084 26 442 48	Blue. Fin. 6 400 3,084 3,645 26 280 442 4,084 48 776	Blue. Fin. Hump-back. 6 400 46 3,084 3,645 - 26 280 111 442 4,084 - 48 776 181	Blue. Fin. Humpback. Sei. 6 400 46 26 3,084 3,645 - - 26 280 11 22 442 4,084 - 3 48 776 181 34	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Blue. Fin. Hump- back. Sei. Sperm. Total of whales. 6 400 46 26 3 481 3,084 3,645 - - 36 6,765 26 280 11 22 11 350 442 4,084 - 3 180 4,709 48 776 181 34 43 1,082	Blue. Fin. Hump- back. Sei. Sperm. Total of whales. off production. 6 400 46 26 3 481 19,345 3,084 3,645 - - 36 6,765 501,528 26 280 11 22 11 350 14,504 442 4,084 - 3 180 4,709 238,247 48 776 181 34 43 1,082 45,028	Species of whales caught. Blue. Fin. Hump- back. Sei. Sperm. Total of whales. Oil production. Shore sta- tions. 6 400 46 26 3 481 19,345 1 3,084 3,645 - - 36 6,765 501,528 - 26 280 11 22 11 350 14,504 1 442 4,084 - 3 180 4,709 238,247 - 48 776 181 34 43 1,082 45,028 1	Species of whales caught. Blue. Fin. Hump- back. Sei. Sperm. Total of whales. Oil production. Shore sta- tions. Float- ing fac- tories. 6 400 46 26 3 481 19,345 1 - 3,084 3,645 - - 36 6,765 501,528 - 6 26 280 11 22 11 350 14,504 1 - 442 4,084 - 3 180 4,709 238,247 - 3 48 776 181 34 43 1,082 45,028 1 -

Table No. 3.—Average size of whales caught in the Antarctic in the season 1945/46.

Coographical areas		Average size.				
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.		
Blue-whales.		Engl. feet.	Engl. feet.	Engl. feet.		
$\left. \begin{array}{c} \text{South Georgia} \dots \\ \text{Males} & 36 \\ \text{Females} & 44 \end{array} \right\} \text{Total 80.} \\ \text{Average} \end{array} \right.$	No. 1 ,, 2 ,, 3	70.0071.8671.6171.72	$ \begin{array}{r} 79.00 \\ 74.42 \\ 73.92 \\ \overline{74.80} \end{array} $	77.5073.2572.7773.41		
Antarctic, pelagic whaling Males 1,826 Females 1,690 Total 3,516.	No. 1 " 2 " 3 " 4 " 5 " 6 " 7 " 8 " 8 " 9	77.37 77.54 76.87 76.16 77.42 76.54 76.77 75.70 74.80	$\begin{array}{c} 80.99\\ 80.57\\ 80.28\\ 81.11\\ 79.71\\ 78.63\\ 78.78\\ 79.19\\ 77.62\end{array}$	$\begin{array}{c} 79.09 \\ 79.05 \\ 78.92 \\ 78.43 \\ 78.42 \\ 77.95 \\ 77.68 \\ 77.32 \\ 76.59 \end{array}$		
Average		74.80	79.85	78.25		

Geographical areas.		Average size.			
Number of whales measured.	Company.	Males.	Females.	Total animals.	
P ¹	- 100-110-100-100-100-100-100-100-100-10	Engl. feet	Engl. feet	Engl. feet	
Fin-whales.					
outh Georgia	No. 1	65.43	68.02	66.52	
$ \begin{array}{c} \text{Males} & 811 \\ \text{Females} & 645 \end{array} \right\} \text{Total } 1,456. $	$ \begin{array}{c} $	$\begin{array}{c} 64.74\\ 64.23\end{array}$	$\begin{array}{c} 67.22\\ 66.90\end{array}$	$\begin{array}{r} 65.94\\ 65.44\end{array}$	
Average	<u> </u>		67.53	66.16	
Average		64.98	07.93	00.10	
Antarctic, pelagic whaling	No. 1	67.68	71.24	69.00	
Males 4,242 Total 7,701.	,, 2	66.82	70.58	68.84	
Females $3,459 \int 100a1 7,701$.	,, 3	66.90	70.30	68.42	
	" 4	66.80 66.09	69.75	$68.15 \\ 67.77$	
	$ $	$\begin{array}{c} 66.08\\ 66.18\end{array}$	$\begin{array}{c} 69.20\\ 69.13\end{array}$	67.47	
	" 7	65.53	68.65	67.14	
	" 8	64.72	68.25	66.17	
	" 9	64.27	66.64	65.49	
Average		66.07	69.20	67.48	
Humpbacks.					
South Georgia	No. 1	37.00	43.44	42.27	
Males 122 m 1 and	" 2	41.58	41.50	41.54	
Females 116 Total 238.	" 3	40.50	42.39	41.41	
Average		40.67	42.32	41.47	
Sei-whales.	27 1	40.00	51.90	50.70	
South Georgia	No. 1	$\begin{array}{r} 48.86\\ 46.60\end{array}$	$51.30 \\ 51.29$	$50.79 \\ 50.23$	
$ \begin{array}{c} \text{Males} & 21 \\ \text{Females} & 61 \end{array} \right\} \text{Total} 82. $	$\frac{2}{3}$	40.00	49.82	49.12	
Average	,, ә	47.86	50.89	50.11	
nverage		11.00	00.00		
Intarctic, pelagic whaling	No. 1	55.00	-	55.00	
$\left. \begin{array}{c} \text{Males} & 2\\ \text{Females} & 1 \end{array} \right\} \text{ Total } 3.$	" 2	52.00	53.00	52.50	
Average		53.50	53.00	53.33	
Sperm-whales.					
South Georgia	No. 1	51.67	-	-	
Males 57	2	47.73	-	-	
	", ²	47.47	-	-	
Average		47.74	-	-	
Antarctic, pelagic whaling	No. 1	53.60	-	-	
Males 216.	" ²	52.28	-	-	
	" 3	52.03	-	-	
	,	$50.69\\50\ 41$		_	
	<i>"</i> 6	49.17	-	-	
	,, 0				

Table No. 4.—Whales caught in the Antarctic in the season 1945/46, by species, sex and size.

Total Antarctic.

Blue-whales.

	Num	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
54	1	_	1	79	147	102	249
55	_	1	ĩ	80	187	139	326
56	1	_	ī	81	90	115	205
57	_	_	-	82	85	100	185
58	1	_	1	83	66	85	151
59	_	1	1	84	31	110	141
60	_		2	85	19	100	119
61	3	$2 \\ 2$	5	86	16	85	101
62	1	5	6	87	9	51	60
63	5	1	6	88	5	64	69
64	8	2	10	89	2	41	43
65	8	7	15	90		23	23
66	6	7	13	91		17	17
67	13	9	22	92		14	14
68	12	15	27	93		2	2
69	3	1	4	94	-	3	3
70	90	78	168	95		1	1
71	85	52	137	Sum	1,862	1,734	¹) 3,596
72	78	52	130				
73	107	42	149			ales:	76.67 feet
74	109	61	170	Average		emales:	79.72 "
75	179	97	276		(To	otal animal	s: 78.14 "
76	160	75	235		(M	ales: 51.	78
77	142	75	217	Per		emales: 48 .	
78	193	97	290		(I'C		
¹) 10 blue	-whales hav	re not been r	neasured.				
			Fin-w	vhales.			

		1					
50	1	1	2	72	94	314	408
51	1	$\begin{vmatrix} 1\\2\\3 \end{vmatrix}$	3	73	41	309	350
52	2	3	5	74	23	251	274
53	3		2 3 5 3 5	75	17	168	185
54	4	1	5	76	5	110	115
55	33	19	52	77	1	70	71
56	26	18	44	78	3	34	37
57	33	32	65	79		11	11
58	50	33	83	80	-	8	8
59	54	53	107	81		6	6
60	174	85	259	82	-		
61	162	66	228	83	-		-
62	212	97	309	84	-		-
63	300	105	405	85	*	2	2
64	470	148	618	Sum	5,053	4,104	1) 9,157
65	623	223	846				, , , , , , , , , , , , , , , , , , , ,
66	603	247	850			ales:	65.90 feet
67	643	272	915	Averag	e size { Fe	emales:	68.94 "
68	512	312	824	-	L To	otal anima	ls: 67.26 "
69	450	341	791		(M	ales: 55	.18
70	365	429	794	Per	cent { H	emales: 55	29
71	148	334	482		(re	maics: 44	.04

¹) 28 fin-whales have not been measured.

Table No. 4 (continued).

	Num	ber of	Total	_	Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
29	1	_	1	48	2	5	7
30	_	_	_	49	_	11	11
31		-		50	-		2
32	_	- 1	-	51	-	21	1
33		-	_	52	-	-	-
34	-	-		53	-	_	-
35	21	21	42	54			
36	6	5	11	55	1		1
37	9	3	12	56		-	-
38	3	3	6	57	1	_	1
39	11	6	17	58	1	_	1
40	8	4	12	Sum	122	116	238
41	8	3	11				
42	15	7	22	Average size { Males: Females:			40.67 feet
43	11	8	19				42.32 "
44	6	7	13		[T	otal anima	ls: 41.47 "
45	8	13	21		(M	ales: 51.	
46	5	8	13	Per		emales: 48.	
47	5	9 (14	1	(1)		
			Sei-	whales.			
42	1		1	54		6	6
42	1	ī		$\frac{54}{55}$	1	1	$\frac{0}{2}$
44	1	1	1	56	1	1	4
45	3	_	3	50 57	_	1	1
46	-	1	1	Sum	23	$\frac{1}{62}$	85
47	3	4	7	Биш (20	04	00
48	2	2	4		ſM	ales:	48.35 feet
49	5	4	9	Average	e size { Fe	emales:	50.92 "
50	4	12	16	0	To	otal animal	ls: 50.22 "
51	2	15	17		``	ales: 27.0	
52	1	8	9	Per		27.0 males: 72.9	
53	-	7	7		נדפ	males: 72.3	9 T

Humpbacks.

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
37 39	1	$50 \\ 51$	40 25
$ 40 \\ 41 $	$\frac{1}{2}$	51 52 53	23 27 34
$\begin{array}{c} 42 \\ 43 \end{array}$	$rac{4}{2}$	$\begin{array}{c} 54 \\ 55 \end{array}$	27 23
$\begin{array}{c} 44\\ 45\\ 46\end{array}$	$1 \\ 6 \\ 10$	56 57	5 6
$40 \\ 47 \\ 48$	$\begin{array}{c}10\\14\\18\end{array}$	58 	2 273
49	$\frac{10}{23}$	Sum	213

Average size: Males: 50.76 feet.

Table No. 4 (continued).

a. South Georgia.

Blue-whales.

			Dine-	whates.			
	Num	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
63	1	_	1	84	_	1	1
64	ī	·	ī	85	-	ī	1
68	_	1 1	1	87	_	1	1
70	13	19	$3\overline{2}$	88.	-	1	1
71	3	2	5	89	-	1	1
72	5	1	6	90	-	1	1
73	5	-			96	44	80
74	1	2	5 3 7	Sum	36	44	80
75	3	4	7				
76	2	1	3			lales:	71.72 feet
77	-	2	2	Averag		emales:	74.80 "
78	2	2	4		{ T	otal anima	ls: 73.41 "
79	-	1	1	Б	. (M	[ales: 45.	.00
80		2	2	Per	$\operatorname{cent} \left\{ \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right\}$	emales: 55	
83		1	1		(-		
			Fin-	whales.			
55	23	12	35	72	7	42	49
56	11	7	18	73	$\frac{1}{2}$	$\overline{35}$	$\overline{37}$
57	8	1i	10	74	_	29	29
58	9	9	18	75	_	20	$\overline{20}$
59	16	15	31	76	- 1	9	9
60	3 2	23	$5\overline{5}$	77	_	6	6
61	38	17	55	78		2	2
62	30	18	48	79	-	1	1
63	39	18	57	81	-	1	1
64	85	22	107	85	-	1	1
65	114	49	163	Sum	811	645	1,456
66	116	41	157				
67	106	58	164			lales:	64.98 feet
68	60	42	102	Averag		emales:	67.53 "
69	64	49	113		-	otal anima	
70	32	56	88	Per		lales: 55	
71	19	52	71			emales: 44.	.30
			Hum	pbacks.			
29	1	_	1	48	2	5	7
$\frac{1}{35}$	21	21	42	49		11	11
36	6	5	11	50	_	2	2
37) 9	3	11 12	51	_	ĩ	ĩ
38	3	3	6	55	1	_	ī
39	11	6	17	57	î	-	ī
40	8	4	12	58	î	-	î
41	8	3	11	Sum	122	116	238
42	15	7	22				
43	11	8	19			[ales:	40.67 feet
44	6	7	13	Averag		emales:	42.32 "
45	8	13	21			otal anima	
46	5	8	13	Dor		[ales: 51	
47	5	9	14	L'et	ΓF	emales: 48	.74

Tabl	e No.	4	(continued).

			Sei-v	whales.			
Engl. feet.	Num	ber of	r of Total		Numb		Total
Engl. leet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
42	1	_	1	53	_	6	6
43	-	1	1	54		6	6
44	1	-	1	55	-	1	1
45	3	-	3	57	-	1	1
46		1	1	Sum	21	61	82
47	3	4	7				1
48	2	2	4			ales:	47.86 feet
49	5	4	9	Average	e size { F	emales:	5 0.89 "
50	4	12	16		(T	otal anima	ls: 50.11 "
51	2	15	17	n	, Î M	ales: 25	.61
52	_	8	8	Per		emales: 74	

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
37	1	48	4
3 9	1	49	1 7
40	2	50	6
41	1	51	6
42	3	52	1
43	1	53	4
44	1	54	1
45	3	55	2
46	4		
47	9	Sum	57

Average size: Males: 47.74 feet.

b. Antarctic, pelagic whaling. Blue-whales.

-	Numl	per of	Total		Num	Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
54	1	_	1	79	147	101	248
55	-	1	î	80	187	137	324
56	1	_	î	81	90	115	205
57	_	_	-	82	85	100	185
58	1	_	1	83	66	84	$150 \\ 150$
59	_	1	ĩ	84	31^{00}	109	140
60	_	$\hat{2}$	$\overline{2}$	85	19	99	118
61	3	$\frac{1}{2}$	$\frac{2}{5}$	86	16	85	101
62	1	$\begin{array}{c} 2\\ 5\end{array}$	6	87	Ĩğ	50	59
63	4	1	5	88	5	63	68
64	7	2	9	89	$\overset{\circ}{2}$	40	42
65	8	$2 \\ 7$	15	90	_	$\tilde{22}$	22
66	6	7	13	91		17	17
67	13	9	22	92		14	14
68	12	14	26	93		2	2
69	3	1	4	94		3	3
70	77	59	136	95		1	1
71	82	50	132		1.000	1,000	9 516
72	73	51	124	Sum	1,826	1,690	3,516
73	102	42	144		(Ms	les:	76.77 feet
74	108	59	167	Average		males:	79.85
75	176	93	269	inverage		tal animals	
76	158	74	232		•		
77	142	73	215	Per		ales: 51.9	
78	191	95	286		ξ Γε	males: 48.0	7

60

Engl foot	Num	ber of	Total	The state of	Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
50	1	1	2	72	87	272	359
51		2	2 3 5 3 5	73	39	274	313
52	2	$\frac{2}{3}$	5	74	23	222	245
53	$\begin{array}{c} 1\\ 2\\ 3\end{array}$	-	3	75	17	148	165
54	4	1	5	76	5	101	106
55	10	7	17	77	$\frac{1}{3}$	64	65
56	15	11	26	78	3	32	35
57	25	21	46	79		10	10
58	41	24	65	80		8	8
59	38	38	76	81		5	5
60	142	62	204	82	-	-	-
61	124	49	173	83		- 1	-
62	182	79	261	84	-	-	-
63	261	87	348	85	-	1	1
64	385	126	511	Sum	4,242	3,459	7,701
65	509	174	683			(0,100	
66	487	206	693		ſM	lales:	66.07 feet
67	537	214	751	Averag	e size { F	emales:	69.20 "
68	452	270	722		T	'otal animal	s: 67.48 "
69	386	292	678		Č M	[a]og. 55	
70	333	373	706	Per	$\operatorname{cent} \left\{ \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right\}$	[ales: 55. 'emales: 44.	00
71	129	282	411	1	r J	emales: 44.	94

Fin-whales.

Sei-whales.

Engl. feet.	Num	ber of	Total	Engl. feet.	Nun	nber of	Total	
Engl. leet.	males.	females.	animals.	s. singi reet.	males.	females.	animals.	
52 53 54	1 -	<u>-</u> 1	1 1	Averag	e size { H	Iales: Temales: Cotal anima	53.50 feet 53.00 " ls: 53.33 "	
55 Sum	$\frac{1}{2}$	 	<u> </u>	Per	$\operatorname{cent} \left\{ \begin{array}{l} \mathbf{I} \\ \mathbf{I} \end{array} \right\}$	Iales: 66 Females: 33	.67 .33	

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
41	1	52	26
42	1	53	30
43	1	54	26
44	-	55	21
45	3	56	5
46	6	57	6
47	5	58	2
48	14		
49	16	Sum	216
50	34	~ uni	210
51	19	Average size	51.56

Table No. 5.—Whales caught in the Antarctic in the season 1945/46, by species, sex and groups of size.

Total Antarctic.

Blue-whales.

	Number of whales.	Per cent.
Group I. (70 feet and less) , 2. (71 feet to and incl. 85 feet) , 3. (above 85 feet)	283 2,980 333	7.87 82.87 9.26
" e . (above ob leet)	3,596	100.00
Immature males	$\begin{array}{c} 422 \\ 510 \end{array}$	$22.66 \\ 29.41$
" animals	932	25.92
Mature males	$1,440 \\ 1,224$	$\begin{array}{c} 77.34 \\ 70.59 \end{array}$
" animals	2,664	74.08

Fin-whales.

	Number of whales.	Per cent.
Group 1. (55 feet and less) , 2. (56 feet to and incl. 65 feet) , 3. (above 65 feet)	70 2,964 6,123 9,157	$0.76 \\ 32.37 \\ 66.87 \\ 100.00$
Immature males " females	755 66 3	$\begin{array}{r}14.94\\16.15\end{array}$
" animals	4,298	<u>15.48</u> 85.06
" females	4,298 3,441	83.85
, animals	7,739	84.52

a. South Georgia. Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less)		43.75
, 2. (71 feet to and incl. 85 feet)	41 4	$51.25 \\ 5.00$
,, 3 . (above 5) leet)	80	100.00
Immature males	28	77.78
" females	3 0	68.18
" animals	58	72.50
Mature males	8	22.22
" females	14	31.82
" animals	22	27.50

Table No. 5 (continued).

63	

F	in	٠W	hal	es.
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	Number of whales.	Per cent.
Group 1. (55 feet and less) » 2. (56 feet to and including 65 feet) » 3. (above 65 feet)	$\begin{array}{r} 35\\571\\850\\\hline 1,456\end{array}$	$2.40 \\ 39.22 \\ 58.38 \\ 100.00$
Immature males ,, females ,, animals	$ 167 152 \overline{319} $	$20.59 \\ 23.57 \\ \hline 21.91$
Mature males, females, animals	$\underbrace{\begin{array}{c} 644\\ 493\\ \hline 1.137\end{array}}$	79.41 76.43 78.09

b. Antarctic, pelagic whaling.

Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less), ,, 2. (71 feet to and including 85 feet), ,, 3. (above 85 feet)	$248 \\ 2,939 \\ 329$	7.05 83.59 9.36
	3,516	100.00
Immature males	$\begin{array}{c} 394 \\ 480 \end{array}$	$\begin{array}{c} 21.58 \\ 28.40 \end{array}$
" animals	874	24.86
Mature males	1,432 1,210	$\begin{array}{c} 78.42 \\ 71.60 \end{array}$
" animals	2,642	75.14

Fin-whales.

	Number of whales.	Per cent.
Group 1. (55 feet and less) , 2. (56 feet to and including 65 feet) , 3. (above 65 feet)	35 2,393 5,273	$0.46 \\ 31.07 \\ 68.47$
-	7,701	100.00
Immature males, females	$\frac{588}{511}$	$13.86 \\ 14.77$
" animals	1,099	14.27
Mature males	$3,654 \\ 2,948$	$86.14 \\ 85.23$
", animals	6,602	85.73

Table No.	6.—Average	production	of oil	per	blue-whale	unit	in	the
	Ānt	arctic in th	e seaso	n 19	45/46.			

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)	
South Georgia	No. 1 ,, 2 ., 3	$228.7 \\ 514.1 \\ 174.1$	$19,168 \\ 43,086 \\ 13,937$	83.8 83.8 80.1	
Average		-		83.1	
Antarctic, pelagic whaling	No. 1 ,, 2 ,, 3 ,, 4 ,, 5 ,, 6 ,, 7 ,, 8 ,, 9	$\begin{array}{c} 811.5\\ 992.5\\ 586.5\\ 1,235.5\\ 853.0\\ 870.7\\ 647.3\\ 427.5\\ 966.5\end{array}$	$\begin{array}{c} 89,682\\ 107,179\\ 61,493\\ 119,546\\ 82,180\\ 82,756\\ 60,120\\ 39,634\\ 86,126\end{array}$	110.5 108.0 104.8 96.8 96.3 95.0 92.9 92.7 89.1	
Average				98.6	

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

Table No. 7.—Whale foetuses measured in the Antarctic in the season 1945/46.

Date when	Lei	ngth.	Sex.	Date when	Lei	ngth.	Sex.	Date when	Lei	ngth.	Sex.
measured.	Mother.	Foetus.	Sea.	measured.	Mother.	Foetus.	JCA.	measured.	Mother.	Foetus.	DCA.
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
² / ₁₁ 45	75	5' 0"	M	$^{10}/_{12}$ 45	80	1'6″	F	17/12 45	90	8' 10"	F
9/	88	6'0"	M	,, ,,	81	7' 10"	M		88	9'4"	\mathbf{F}
$\binom{11}{13}$	84	2' 6''	F	,, ,,	85	6' 0"		[,] ", ", ¹⁸ / ₁₂ "	81	3' 11"	M
$\frac{23}{11}$,	84	6'0"	M	,, ,,	85	6'0"	M	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	79	2'0"	F
	70	2'6''	F	$\frac{12}{12}$,	83	4' 8"	M		87	6'0"	M
$\frac{25}{11}$, $\frac{29}{11}$,	81	3' 0"	M	,,,,,	86	6'7''	F	$\frac{19}{12},$	84	11'0"	\mathbf{F}
$\frac{29}{11}$,	76	1'4"	\mathbf{F}	,, ,,	86	4'9"	M	²⁰ / ₁₂ ,,	86	8'0"	M
	81	4' 0"	M	,, ,,	80	3' 0"	F	,, ,,	82	5' 0"	F
³⁰ / ₁₁ "	82	4'7"	F	13/12 ,	82	5'0"	\mathbf{F}	,, ,,	84	9' 0 <i>"</i>	\mathbf{F}
	81	3' 0"	F	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	78	3' 2"	M		85	6' 0"	M
$\frac{1}{12}$,	86	4' 4"	M	,, ,,	84	5' 10"	M	²¹ / ₁₂ ,,	88	6' 6"	
³ / ₁₂ ,,	82	6'0"	F	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	79	3' 0"	\mathbf{F}	,, ,,	82	9'0"	M
$\frac{4}{12}$,	92	4'8"	F	$\frac{14}{12}$,	88	1'10"	\mathbf{F}	33 33	87	5' 0″ ·	F
5/12 ,,	88	4'9''	M	15/12 ,	80	6' 0"	M	,, ,,	86	5' 5''	Μ
	94	7'0"	M	,, ,,	91	1'8″	\mathbf{F}	$\frac{22}{12}$,	84	3'0"	M
°/ ₁₂ ,,	81	5' 3''	F	,, ,,	83	7' 2"	M	,, ,,	90	5'0''	F
⁹ /12 ,,	89	3' 8"	F	,, ,,	85	4' 8"	\mathbf{F}	23/12 ,,	79	4' 0"	\mathbf{F}
	89	1'0"	F	16/ ₁₂ ,,	73	4'8''	\mathbf{F}	$\frac{26}{12}$,	79	7'0''	M
¹⁰ / ₁₂ ,,	81	5' 8"	M	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	83	3' 11"	M	27/12 ,,	80	11' 0"	M

Blue-whale foetuses.

Table No. 7.—Blue-whale foetuses (cont.)

Date	Lei	ngth.	Sex.	Da		Le	ngth.	Sex.	Da		Ler	ngth.	Sex.
when measured.	Mother.	Foetus.	Sex.	wh measu		Mother	Foetus.	Sex.	measu		Mother.	Foetus.	bex.
	Engl. ft.	Engl. ft.				Engl. ft.					Engl. ft.	-	
$^{27}/_{12}$ 45	91	6'0'' 4'0''	F	16/1	46	83	6'0'' 14'0''	F M	$\frac{4}{2}$ $\frac{5}{2}$	46	90 83	12'0'' 7'0''	M M
$\frac{28}{12}$, "	89 88	4 0 8'0"	M M	,,	"	89 92	14 0 13'7''	M	6/2	"	87	13'4"	F
/12 ,,	88	4' 0 "	F	17/1	" "	80	5'0"	M	$\binom{6}{2}{7}{2}{7}{2}{7}{2}{7}{2}{7}{2}{7}{2}{7}{7}{2}{7}{7}{2}{7}{7}{7}{2}{7}{7}{7}{7}{7}{7}{7}{7}{7}{7}{7}{7}{7}$	" "	88	8'0"	F
,, ,,	86	3' 0''	Μ	,,	,,	92	11'0".	M	8/2	,,	87	5'0"	Μ
	84	3'0"	F	,,	,,	80	8'5"	M	,,	,,	84	18'0"	F
$\binom{29}{12}$, $\binom{29}{12}$, $\binom{30}{12}$, $\binom{30}{12}$,	$\frac{81}{85}$	4'0'' 11'0''	\mathbf{F} \mathbf{F}	18]1	"	$\frac{89}{81}$	16'3'' 4'0''	\mathbf{F} \mathbf{F}	"	"	81 92	9'7'' 18'0''	F M
	77	3'0"	F		"	84	10'0"	M	"	"	81	7'0"	M
·· ·· ·· ··	80	5'0"	\mathbf{F}	,, ,,	" "	86	14'0"	Μ	"/2	" "	82	5'6"	Μ
,, ,,	81	9'0"	\mathbf{F}	,,	,,	85	12'0"	M		,,	$\frac{75}{75}$	12'0"	\mathbf{F}
³¹ / ₁₂ ,,	86	8′ 2″ 0′ 1″	F	,,	"	79 85	$\frac{11'0''}{8'0''}$	F	10/2	"	$\begin{array}{c} 79 \\ 85 \end{array}$	11′0″ 17′0″	\mathbf{F} \mathbf{F}
	$\begin{array}{c} 91 \\ 79 \end{array}$	3' 10"	M M	19]1	"	$\frac{85}{85}$	10'0"	$\left \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right $	"	"	80	8'0"	r F
»» »»			-111	/1 ,,	" "	85	4 '0"	$\mathbf{\hat{F}}$	"	" "	$\ddot{86}$	14'0"	$\mathbf{\tilde{F}}$
$^{1}/_{1}$ 46	86	8' 0 "	F	,,	,,	78	5'0"	M	$\frac{11}{2}$,,	87	4'0''	Μ
,, ,,	76	4' 0''	M	,,	"	84	10'0''	\mathbf{F}	,,	"	84	14'0''	M
»» »»	80 81	11' 0" 3' 0"	${f M}{f F}$	"	"	$\frac{77}{81}$	$\frac{7'0''}{9'0''}$	M F	,,	"	80 79	17' 0" 8' 0"	${f M}{f F}$
** **	86	8' 8"	F	"	"	86	12'0''	M	$\frac{12}{2}$	"	85	13'0"	F
$\frac{2}{1}$, "	81	6' 0"	F	"	" "	86	7'8″	M	,,,	"	84	13' 0"	F
	78	4'1"	F	2071	,,	91	12'0''			,,	86	18' 2"	Μ
3/1 ,,	86	10'0''	M	21/1	,,	86	$\frac{6'0''}{12'0''}$	\mathbf{F}	$\frac{13}{2}$,,	79	$\begin{array}{c c} 6' 0'' \\ 7' 0'' \end{array}$	M
·· ··	88 82	$ \begin{array}{c} 6' 0'' \\ 6' 0'' \end{array} $	$\mathbf{F} \parallel \mathbf{F} \parallel$		"	$\begin{array}{c}91\\77\end{array}$	$\frac{12}{7'0''}$	\mathbf{F}	$\frac{14/2}{15/2}$	"	$\begin{array}{c} 80\\ 81 \end{array}$	10'0"	M F
»» »»	82	9' 0"	F	"	,, ,,	87	9'10"	M	/ 2 ,,	,, ,,	89	16'0"	F
,, ,, ,,	88	12' 1"	M	" "	,,	83	5'1"	M	,,	,,	78	11'0″	Μ
4/̈́ı "	85	5'0''	M		,,	84	13'1''	M	,,	,,	82	10' 10"	F
5/1 ,,	$\begin{array}{c} 79 \\ 85 \end{array}$	$5' 0'' \\ 4' 0''$	F M	22/1	,,	$\frac{81}{77}$	$\begin{array}{c c} 7' 0'' \\ 3' 0'' \end{array}$	$\left. {f F} \right\ {f F} \right\ $	16/2	"	88 88	11′ 10″ 19′ 0″	F M
	80	7'0"	M	**	"	83	13'9"	M	- / 2	"	85	7'0"	M
·· ·· ·· ··	87	13' 0"	M	"	"	87	4'6"	M	" "	"	80	13' Õ″	F
·· ··	86	11'0"	Μ	²³]	,,	83	19' 0"	\mathbf{F}	,,	,,	81	12' 0"	Μ
», »,	86	7'0''	M	,,	,,	84	9'0''	M	1?2	,,	77	8'0"	F
$\frac{6}{1}$, ", ", ", ", ", ", ", ", ", ", ", ", ",	$\frac{88}{85}$	$\begin{array}{c c} 11'0''\\ 2'0'' \end{array}$	F M	"	"	80 79	$\begin{array}{c c} 11'0'' \\ 6'0'' \end{array}$	$\left \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right $	1 ⁷ / ₂	"	$\left \begin{array}{c} 87\\ 86 \end{array} \right $	18'0" 19'0"	F M
8/	89	3 ' 0"	\mathbf{F}	"	"	82	7'0"	F	"	"	85	17'0"	M
/1 ,,	85	4' 0"	F	" "	"	84	12' 2"	\mathbf{F}	,, ,,	"	79	10' 0"	\mathbf{F}
	89	11' 2"	M		,,	82	8'0"	\mathbf{F}		,,	85		F
9″, ",	84	$\frac{3'0''}{c'e''}$	M	²⁴]′1	,,	78	14'0"	\mathbf{M}	$\frac{18}{2}$,,	76		М
10/1 "	$\begin{array}{c c} 76\\82 \end{array}$	6' 6'' 6'' 6' 6' 0''	M M	,,	"	$\begin{array}{c c}78\\84\end{array}$	$\frac{12' 0''}{8' 0''}$	$\begin{array}{c c} \mathbf{M} \\ \mathbf{F} \end{array}$	$\frac{10}{2}$,,		16'0" 20'0"	\mathbf{F}
/1 ,,	86	12' 0"	M	,, 	,, ,,	84	5' 5''	M	/2	,, ,,	92	10' 2"	F
,, ,,	78	13' 0"	\mathbf{F}	²⁵ / ₁	,,	87	8'0″	Μ	$\frac{21}{2}$,,	80		М
¹¹ / ₁ "	80	6'4"	M	26/1	,,	89	19' 5"	F	,,	,,	86		F
¹¹ /1 ,,	82 80	8' 0" 6' 0"	F M	$\frac{2^{0}}{1}$	"	83 88	9' 10" 11' 0"	$\left \begin{array}{c} \mathbf{F} \\ \mathbf{F} \end{array} \right $,,	"	78 87		M F
** **	80	5'4"	\mathbf{F}		"	80	8'0"	M	²² / ₂	"	82		F
,, ,, ,, ,,	82	7'0"	F	" "	"	85	17'4"	\mathbf{F}	,,	"	85	15'0''	\mathbf{F}
12/1 ",	90	5'0"	M	••	• ,,	80	13' 4"	F		,,			\mathbf{F}
·· ··	84 80	8'0" 6'0"	F M	28/1	"	$\begin{array}{c} 89\\ 87\end{array}$	$\begin{array}{c} 7' 0'' \\ 4' 0'' \end{array}$	M M	$\frac{23}{2}$	"		18' 3" 14' 0"	м
,, ,,	81	7'0''	M	,,	"	88	$\frac{4}{8'}\frac{0}{2''}$	F	**	"			F
¹³ / ₁ ,,	79	5' 0"	$\mathbf{\tilde{F}}$	29/1	"	80	7' 0"	M	24/2	" "			M
,, ,,	82	7' 0"	Μ	$\frac{29}{1}$,,	88	12'0"	\mathbf{F}		,,	84	12' 0"	\mathbf{F}
14/1 "	84	13'4"	M	$^{2}/_{2}$,,	81	$\frac{11'0''}{7'7''}$	M	²⁵ / ₂	,,	-		F F
	$\begin{array}{c} 84\\82\end{array}$	5'0'' 10'5''	M M	3/2	"	84 88	13'0"	$\left. \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right $	26/2	"			F F
·· ··	1 04	1 10 0 1	TAT	/ 2	,, I	00	10 0 1	x ∥	/ 2	,, l			-

 $\mathbf{5}$

Date when	Lei	ngth.	Sex.	Dat whe		Lei	ngth.	Sex.	Date when	Lei	ngth.	Sex.
measured.	Mother.	Foetus.	SCA.	measu		Mother.	Foetus.	BEA.	measured.	Mother.	Foetus.	JOA.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.			Engf. ft.	Engl. ft.	
$^{26}/_{2}$ 46	89	8'0''	M	$\frac{4}{3}$	46	90	9' 0"	F	$^{13}/_{3}$ 46	86	14'0''	M
	84	12'0''	M		"	84	11'0''	F		85	22'0''	\mathbf{F}
$\frac{27}{2}$,	89	18'0"	M	³ / ₃	,,	77	16'0''	F	$\frac{14}{3}$,	84	17'0''	M
	84	5'0''	Μ	,,	,,	86	10' 0"	F		76	11'0"	\mathbf{F}
$\frac{28}{2}$,	83	9'0"	M	6/3	,,	85	9'6''	F	17 _{/3} ,	78	10' 0"	Μ
1/	88	13'0"	\mathbf{F}	7/3	,,	86	20' 0"	M	20/	83	15'0''	м
2/	81	10' 6"	\mathbf{F}		,,	83	14'7"	M	24/	90	21'0''	
	86	10'0"	M	*/3		86	16' 0"	F		82	15'1''	\mathbf{F}
** **	81	14' 0"	\mathbf{F}	⁹ /3	"	90	18' 0"	F	⁸ /4 ,,	$\overline{92}$	12' 0"	M
³ / ₃ ",	$\tilde{91}$	6′ 0″	$\mathbf{\bar{F}}$	10/	"	86	14' 0"	M		$\tilde{92}$	$\tilde{20'}0''$	1.12
/3 ,,	87	10' 0"	$\mathbf{\bar{F}}$	$\frac{12}{3}$	" "	87	20' 0"	\mathbf{F}	** **			

Table No. 7.—Blue-whale foetuses (cont.).

Total 262 blue-whale foetuses, of which 125 males and 130 females. Sex was not stated for 7 foetuses. Of the 255 foetuses for which sex was stated 49.02 per cent were males and 50.98 per cent females.

			Fin-	whale f	oetuses.				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 71\\ 67\\ 74\\ 72\\ 73\\ 74\\ 63\\ 66\\ 71\\ 69\\ 73\\ 70\\ 71\\ 71\\ 76\\ 71\\ 76\\ 71\\ 76\\ 71\\ 76\\ 74\\ 70\\ 74\\ 71\\ 73\\ 78\\ 74\\ 68\\ 73\\ 72\\ 66\\ 81\\ 73\\ 72\\ 66\\ 81\\ 73\\ 73\\ 72\\ 66\\ 81\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\left \begin{array}{c} 76\\ 77\\ 65\\ 76\\ 69\\ 71\\ 67\\ 74\\ 74\\ 76\\ 72\\ 68\\ 74\\ 77\\ 70\\ 74\\ 77\\ 78\\ 67\\ 70\\ 74\\ 77\\ 78\\ 67\\ 70\\ 74\\ 68\\ 74\\ 75\\ 70\\ 72\\ 70\\ 74\\ 68\\ 74\\ 75\\ 71\\ 72\\ 68\\ 67\\ 71\\ 72\\ 73\\ 70\\ 72\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 72\\ 73\\ 73\\ 70\\ 73\\ 73\\ 70\\ 73\\ 73\\ 70\\ 73\\ 73\\ 70\\ 73\\ 73\\ 70\\ 73\\ 73\\ 73\\ 70\\ 73\\ 73\\ 73\\ 70\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 70\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73$	5' 4" M 9' 8" F 1' 3" M 3' 6" M 2' 9" M 3' 4" F 3' 2" M 4' 0" F 5' 0" M 6' 0" M 3' 6" 2' 6" 3' 6" 2' 6" 3' 6" 2' 6" 3' 6" 9' 6' 0" 3' 0" M 4' 0" F 3' 0" M 4' 0" F 3' 0" M 7' 0" M 5' 0" M 2' 2" F 2' 2" F 2' 2" F 2' 4" M	$\binom{712}{\binom{28}{12}}, \frac{3}{12}, \frac{3}{$	$\left \begin{array}{c} 74\\ 80\\ 76\\ 75\\ 74\\ 68\\ 74\\ 72\\ 76\\ 76\\ 76\\ 76\\ 76\\ 76\\ 75\\ 75\\ 77\\ 71\\ 73\\ 68\\ 78\\ 75\\ 74\\ 72\\ 71\\ 75\\ 70\\ 73\\ 69\\ 76\\ 68\\ 66\\ 70\\ 79\\ 77\\ 76\\ 72\\ 73\\ 73\\ 73\\ 73\\ 75\\ 70\\ 76\\ 72\\ 73\\ 73\\ 75\\ 73\\ 75\\ 76\\ 72\\ 73\\ 73\\ 73\\ 75\\ 73\\ 75\\ 75\\ 75\\ 75\\ 75\\ 75\\ 75\\ 75\\ 75\\ 75$	2'9'' 0'6'' 6'0'' 8'0''' 7'0'' 4'6''' 1'0'''''''''''''''''''''''''''''''''''	MMMFMMM MFFMFM FMMF MFFMFF MMFM M

Fin-whale foetuses.

Table No. 7.—Fin-whale foetuses (cont.).

Date when	Lei	ngth.	Sex.	Da		Ler	ngth.	Sex.	Da		Lei	ngth.	Sex.
measured.	Mother.	Foetus.	Bex.	measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
⁴ / ₁ 46	73	9' 0"		13/1	46	71	6' 8"	F	18/1	46	73	2'0"	
⁵ / ₁ ,,	71	5'6''	M	,,	,,	73	8' 6"	M	,,	"	77	8'4"	M
·· ··	71	3' 0"	M	,,	,,	67	4'2''	F	,,	,,	71	5'6"	F
,, ,,	67	1'0''	F	,,	,,	69 79	5' 3"	M	,,	,,	74	9'0" 4'2"	M
» »	71 73	3' 0" 6' 0"	M F	,,	,,	$\begin{array}{c c} 73\\71\end{array}$	4'4'' 8'0''	M M	,,	,,	$\begin{array}{c c} 65\\73\end{array}$	$\frac{42}{6'8''}$	F M
»» » »	70	5'0"	M	"	,,	71	4'0 "	F	**	"	72	11'0"	F
"/ ₁ "	66	1'9"	F	14/1	"	73	8'0"	M	"	"	73	9'0"	M
	70	5' 0"	M	,,	,, ,,	69	2' 0"	M	19/1	" "	67	9'0"	F
⁸ / ₁ ",	71	4'0"	F	27	.,	68	2'0"	M	,,	,,	69	1'0"	F
,, ,,	73	10' 0"	M	,,	,,	71	7' 6"	\mathbf{F}	,,	,,	67	2'0''	\mathbf{F}
» »	76	6'0"	F	,,	,,	70	4' 3"	M	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	79	12'0"	M
,, ,,		5'0"	F	"	,,	74	3' 8"	M	,,	,,	70	2'0"	3.6
,, ,,	76 76	5'0'' 1'0''	F M	",	,,	78	4'0" 1'0"	M M	,,	"	70 76	5′ 3″ 8′ 4″	M M
ÿ, ",	73	7'0"	F	"	,,	74	$\frac{1}{4'}0''$	M	**	"	68	10' 0''	F
	72	0' 10"		15/1	••	72	3'6"	M	,,,	"	72	9' 6"	F
** **	76	4'0"	M	,,	" "	61	5' 0"	M	,, ,,	" "	73	5' 8"	M
,, ,,	75	5'0"	M	,,,	"	68	6' 0"	\mathbf{F}	**	,,	70	4' 8"	M
» »	69	11' 0"	M	.,	,,	68	4'0"	M	,,	,,	70	2'4''	F
,, ,,	71	2' 3"	M	,,	,,	72	3' 6"	F	. ??	,,	68	2'0"	M
,, ,,	72	3'4"	F	,,	,,	70	10'0"	M	20/1	"	66	2'3"	M
,, ,,	68	5' 10' 7' 0"	' M M	,,	,,	80	2'0"		**	,,	75	3'0" 1'0"	F F
»» »»	69 73	5'3"	M	,,	**	76 68	3'0'' 4'2''	м	,	**	70 71	9'0"	F
»» »»	70	5'8"	M	**	**	70	8'4"	M	"	"	70	5'0"	F
>> >> 10/		f 6'0"	M	"	,, ,,	75	11' 3"	F	>> >>	,, ,,	66	7'0"	M
10/1 "	74	6'0"	\mathbf{F}	16/1	"	75	4'0"	M	,,	"	71	11'7"	М
,, ,,	76	5'0"	\mathbf{F}	,,	"	73	3' 0"	M	,,	,,	73	4' 6"	\mathbf{F}
»» » »	69	6'4"	F	,,	,,	70	6'0 "	M	>>	,,	73	12'0"	M
** **	72	8'6"	M	,,	"	65	3' 8"	M	>>	••	66	3'8"	F
» » »	73	7' 2'' 2'' 2' 0''	F M	,,	,,		6'4" 4'2"	M M	,,	••	69 65	10' 2'' 9' 5''	F F
¹¹ / ₁ "	70	$\frac{2}{9'0''}$	M	>>	,,	65 73	9'6"	M	,,	"	68	3'0"	M
	75	3' 3"	M	**	"	72	7' 6"	M	"	**	68	5'0"	M
·· ·· ··	67	4'7"	F	>> >>	" "	71	6'4"	M	21/1	" "	72	9'0"	M
,, ,,	70	12'0"	F	,,	,,	70	9'0"	M	,,	,,	65	8'0"	M
,, ,,	70	9'0"	M	,,	,,	66	4' 5"	F	,,,	**	71	2'6"	1.1
,, ,,	68	7'6" 4'8"	F	,,	,,	72	4'4"	F	,,	,,	75	11' 3" 9' 6"	M F
** **	76 76	6' 10'	M " F	17/1	,,	80	8'3" 10'0"	M M	,,	**	70	7'6"	M
** **	74	7' 2''	M			75	8'0"	M	,,	"	68	4'8"	M
** **	69	5' 0"	M	**	,, ,,	76	10'0"	M	,, ,,	" "	70	2' 0"	M
¹² / ₁ "	74	6' 0"	M	,,	,,	70	6'6"	M	,,	"	73	3' 0"	M
,, ,,	74	2'0"	M	,,	,,	69	4'4"	M	,,	,,	70	9'0"	F
,, ,,		4'0"	F	>>	,,	75	6'0"	M	,,	,,	72	9'0"	F
,, ,,	79 70	4'0" 1'10	/ M	11 22	,,	71	1'0'' 7'0''	M	221	,,	71 72	12' 0" 8' 0"	F M
» »	75	9'5"	$\ \mathbf{M} \\ \mathbf{F} $,,	,,	72	3'5"	F	²² /1	**	65	1'0"	M
** **	73	12' 0"	F	"	,,	78	10'6"	F	,,,	"	72	6'0"	1
** **	65	8'6"	Ē	**	,,	67	3'5"	F	,,	"	73	5' 3"	F
** **	67	1' 2"	Μ	"	" "	69	4' 2"	F	,,	" "	73	2' 0"	М
,, ,,	68	3'4"	M	,,	,,	66	5'0"	F	,,	,,	70	6'0"	F
** **		8'0"	F	,,	,,	77	7'5"	M	,,	,,	73	6'0''	M
** **	74 74	8'0" 3'0"		18/1	,,	67	7' 6" 6' 6"	F	,,	,,	72 72	12'0'' 4'0''	F F
13/1 ,	72	6'8"	F F			67 73	9'0"	M M	23/1	"	72	4 0" 6'0"	L L
/1 ,	72	12'0"	M	"	**	72	10'0"	M	/1	"	74	6'4"	M
77 75	,	, v	1 414	() ,,	**		1-0 0	,		"	· · ·		

Date		Ler	ngth.	~	Da		Lei	ngth.	C	Dat		Ler	ngth.	Sex.
whe: measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	DCA.
		Engl. ft.	Engl.ft.				Engl. ft.	Engl. ft.				Engl. ft.		
²³ /1	46	71	14'2''	\mathbf{F}	²⁸ /1	46	70	∫ 8′10″	M	5/2	46	67	3' 8"	M
,,	,,	69	8'4"	M	/1	10	1	11'0"	F	,,	"	74	9'3'' 7'4''	F F
,,	,,	69 79	6' 0"	F	,") 90/	,,	69 79	6'6"	M	,,	"	69 73	7'0"	M
,,	,,	72	6'0"	F	²⁹ /1	,,		11'0" 7'6"	\mathbf{M}	°/2	"	69	8'0"	M
,,	"	$\begin{array}{c} 71 \\ 74 \end{array}$	3′ 3″ 8′ 0″	M F	,,	"	68 69	2'0"	M		••	73	14'0"	M
24/1	"	67	3'4''	M	••	"	75	8'0"	F	"	"	65	$\frac{1}{2'0''}$	F
	,,	71	8'10"	F	"	"	68	1'0"	M	,, ,,	" "	70	3'9"	F
,,	,,	69	9' 0"	F	,, ,,	" "	69	8'0"	F	,,	"	70	6'6"	M
,, ,,	" "	67	5' 0"	F	,,	"	68	6' 0"	F	1	,,	66	2'4''	M
,,	,,	78	8'0"	M	,,	,,	67	11'0"	F	?'/2	,,	73	6'0"	M
	••	68	4'0''	M	,,	,,	71	6'0''	M	**	"	73	6'0''	F
2 ³ /1	,,	66	5'3''	M	,,	,,	72	3'0"	F	,,	,,	74	7'0'' 14'6''	M M
,,	"	72	1'0"	M	30/	"	71	4'4'' 3'0''	F	"	"	75 70	14'' 12''4''	M
,,	"	70 69	4'0'' 8'4''	F F	30/1	,,	69	3'0"		"	"	69	$\frac{12}{7'9''}$	F
"	"	71	10'6"	M	,,	,,	69	10' 6"	F	"	"	75	10' 8"	M
,,	,,	71	7' 0"	F	**	"	69	9' 8"	M	,, ,,	" "	73	10'0"	Μ
" "	"	69	3' 0"	F	"	" "	67	5'0"	F	,,	,,	71	7'0"	F
	"	72	2' 10"	F	31/1	,,	74	9'0"	F		,,	73	9'0"	F
2 [°] /1	,,	70	7'0"	M	,,	,,	73	5'0"		8/2	,,	67	8'0"	M
,,	,,	72	5'0"	F	,,	,,	70	2'0''	3.5	"	,,	77	13'0''	F
,,	,,	70	5'9''	M	,,	,,		7'0'' 5'0''	M M	**	**	71 73	$ \frac{8'3''}{10'0''}$	M
,,	"		10' 6'' 4' 7''	F	,,	,,	77	5'0''	M	,,	"	73	$\frac{10}{4'0''}$	
,,	,,	$\begin{bmatrix} 70 \\ 76 \end{bmatrix}$	6'6"	M M	i/2	**	67	6'6"	F	,,	"	70	5'0''	M
,,	••	66	6'0"	M		"	72	2'0"	$\mathbf{\tilde{F}}$	"" ""	"" ""	70	2'4''	M
,,	"" ""	74	7' 0"	F	" "	,, ,,	73	5'0"		,,,	,,	72	6'7"	F
,, ,,	,,	73	7' 0"	\mathbf{F}	,,	,,	67	3' 6"			"	69	6'1''	M
,,	,,	70	7' 0"	M	,,	,,	67	8'4"	M	9/2	"	70	6'0"	F
,,	,,	67	3'0"		,,	,,	70	7' 9" 6' 0"	F	,,	,,	$\begin{array}{c c} 64 \\ 72 \end{array}$	8' 6" 4' 0"	M F
,,	,,	69 70	4'0'' 5'2''	F F	**	,,	75 73	5'0"	M F	•••	,,	75	14'0"	F
27/1	**	73	9' 0''	F	,,	**	73	8'9"	Ē	**	••	70	6' 0"	M
	**	72	9'0"	Ē	?/2	**	74	12'0"	M	,, ,,	,, ,,	71	4'0"	Μ
" "	" "	70	10' 0"	M	,,	" "	73	12' 0"	M	,,	,,	68	7'0"	M
,,	,,	68	7'5"	\mathbf{F}	,,	,,	73	5' 0"	\mathbf{F}	1	,,	75	9'7"	M
,,	,,	70	10' 8"	F	,,	,,	68	4'0"	F	10/2	,,	71	1'0''	M
,,	,,	67	6'0"	M	,,	,,	71	11'0"	M	,,,	"	70 70	9'0" 9'0"	F F
,,	,,	69 74	8'4" 4'8"	M	3/2	"	75 72	5'6"	F	,,	,,	75	6'0"	F
,,	••	74	6'0"	M F	11	,,	73	10' 6"		,,	••	74	10' 0"	
,,	••	73	6'0"	F	,,	• •	67	4'0"		,, ,,	,, ,,	69	6'6"	M
,,	,,	71	3' 0"	M	,, ,,	,, ,,	73	5' 6''		,,	,,	71	8' 4"	
,, ,,	,, ,,	69	7'0"	M	,,	,,	66	5'0''	\mathbf{F}	,	,,	71	12' 3"	F
,,	,,	70	4'0"	\mathbf{F}	• • •	,,	75	6'0"	M	,,	,,	71	7'0"	F
	,,	66	3'1"	M	,,	"	69	3'0"	F	"	,,	67	12'0'' 9'0''	
28/1	,,		9'0"	F	,,	"	70	12'0'' 7'0''	F	,,	,,	$\begin{array}{c c} 72\\71 \end{array}$	4'0"	
,,	,,	$\begin{array}{c c} 68\\72\end{array}$	5'0'' 10'0''	M	"	,,	70	4'0"	M F	"	,,	75	$\frac{4}{3'0'}$	
"	,,	68	5'0"	F	"	**	68	2'0"	M	**	"	64	4'0'	' M
,,	"	72	6'0"	M	4/	,, , .,	73	10' 0"	M		" ? "	73	8'0'	$ \overline{\mathbf{F}} $
**	"	69	5'0"	F	,,	2 ,,	72	5' 6"		,,,	• • • • • • • • • • • • • • • • • • • •	73	10′ 0′	
" "	" "	69	1'6"	M	,,	"	70	4' 8"		,,	,,	73	6' 0'	
,,	,,	63	3'0"		,,	,,	69	5'7"		,,	,,		11'5'	
,,	,,	65	5'0"		27,	,,	73	11'0"		. 11	,,	$\begin{array}{c c} 68\\71\end{array}$	14'0'	
,,	,,	70	5'0''		3)	2 ,,	71	3' 0" 10' 0"			,,	71	3'3'	
,,	,,	73	5'0"	M	,	**	72	110.0	' M	· "	,,	1 10	1 0 0	1 117

Table No. 7.-Fin-whale foetuses (cont.).

Table No. 7.---Fin-whale foetuses (cont.).

Date	Ler	ngth.	Sex.	Date	Lei	ngth.	0	Date	Ler	ngth.	Sex.
when measured.	Mother.	Foetus.	bex.	when measured.	Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	bex.
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$^{11}/_{2}$ 46	70	6'0"	Μ	$^{18}/_{2}$ 46	73	9' 0"	M	$\frac{25}{2}$ 46	71	9'0"	F
,, ,,	73	8'0"	F	,, ,,	67	3' 9"	F	,, ,,	71	11'0''	M
,, ,,	71	13'0"	F	·· ··	75	15' 3"	M	,, ,,	72	8'0"	M
,, ,,	72	11'0"	M	,, ,,	63	6'0"	F	,, ,,	74	6' 8''	M
,, ,,	66	9'0"	M	,, ,,	65	3' 0"	F		77	6'0"	M
	69	10'0"	F		66	12'0''	M	²⁶ / ₂ ,,	69	10'0"	F
$\frac{12}{2}$,	73	8'0"	M	¹⁹ / ₂ "	75	6'0"	F	/2 ,,	66	14'0"	F
	72	5'0"	M	,, ,,	69	7'0"	F	· · · · · · · · · · · · · · · · · · ·	74	18'0"	\mathbf{F}
·· ·,	74	9' 0"			71	12'0"	F		68	1'6''	F
,, ,,	67	11'3"	M	,, ,, ,, ,,	67	3' 5''	F	·· ·· ·· ··	68	8' 0"	F
·· ·· ··	68	4'0"	M	,, ,,	70	5'0"	M	,, ,,	70	12' 0″	M
,, ,,	78	8'0"	\mathbf{F}	,, ,,	76	12'0"	M	,, ,,	69	8'0"	F
,, ,,	66	6' 6"	Μ		74	5'0"	F		74	5'0"	F
,, ,,	75	8'0"	F	,, ,,	1	[11'0"	M	·· ·· ·· ··	73	2'0"	\mathbf{F}
	73	10' 0"	M	,, , ,	71	10' 0"	F		76	13'0"	F
	70	7' 0"	M		76	9'0"	M	27/2 ,	73	6'0"	M
	69	9'0"	F	,, ,,	71	3' 0"	F		75	7'0"	F
	68	11'0"	F	$\frac{20}{2}$, ",	76	13' 0"	$\mathbf{\tilde{F}}$	** **	72	3' 0"	M
$\frac{13}{2}$,	73	11'0"	M		72	13'0"		·· ··	70	14'0"	F
	77	10' 0"		,, ,,	71	5'0"		,, ,,	76	5'0"	F
	73	12' 2"	F	,, ,,	73	12' 0"		,, ,,	71	8'0"	M
	72	9'0"	F	,, ,,	71	12'0''		,, ,,	73	1'0"	F
·· ··	71	3' 0"	F	ss ss	72	16'0"	M	** **	69	8'0"	F
·· ·, ·· ·,	70	7' 0"	F	,, ,,	73	8'9"	M	· · · · ·	68	4'0"	M
	76	10' 0"	F	** **	75	2' 8"	F	** **	69	9'0"	F
	67	5'7"	M	** **	75	10' 0"	F	²⁸ / ₂ ",	75	7'0"	F
" "	73	9'0"	M	·· ··	72	8'0"	F		75	13'0"	M
" "	72	2' 0"	F	,, ,,	71	2'0"	M	> 7 >7	73	8'0"	F
$\frac{14}{2}$,	63	11' 0"	M	·· ··	67	3' 0"	M	,, ,,	72	12' 0"	M
	71	8'0"	M	$\frac{21}{2}$,	72	10'0"	M	ı"/" ",	68	11'0"	F
$\frac{15}{2}, \frac{15}{2}, \frac{16}{2}, \frac{16}{2}, \frac{16}{2}$	68	7' 0"	M	1	74	11'0"	F		71	10' 0"	M
16/2 "	69	4' 10"	M	** **	70	4'6"	F	» »	73	8'0"	F
	70	10'0"	M	** **	67	4'8"	M	· · · · ·	75	1'10"	M
·· ··	67	11'0"	M	** **	65	4'0"	F	,, ,,	75	5' 0"	
** **	71	8'0"	M	,, ,,	73	10'0"	Ē	,, ,,	72	11'0"	F
** **	69	15' 0"	F	,, ,,	70	9'0"	M	,, ,,	73	10'0"	F
" "	71	9'0"	F	· · · · ·	67	4'0"	F	· · · · ·	70	6'0"	M
·· ··	71	10' 0"	F	»» »»	70	12'0"	M	,, ,,	68	8'0"	M
·· ··	68	9' 10″		** **	71	8'0"	M	·· ··	68	9'0"	M
$\frac{17}{2}$ "	72	2' 0"	F	** **	75	2' 8"	M	>> >> >> >>	68	8'0"	M
,, ,,	77	15' 0"	M	,, ,, ,, ,,	74	6'0 "	F		67	6'0"	\mathbf{F}
·· · ·	72	14'0"			72	3' 0"	M	›› ›› ›› ››	70	4'0"	Μ
·· · ·	$\overline{72}$	11'0"	M	²² / ₂ ,	68	6'0"	M	··· ··	70	8'6"	\mathbf{F}
·· · ·	70	8'4"	F		70	3' 0"	M	·· ··	69	9'6"	\mathbf{F}
·· · ·	67	3'7"	M	ł.	73	13' 5"	F		69	9'0"	F
·· ··	71	6'0"	F	$\frac{23}{2}$, ,	75	8'0"	M	$\frac{2}{3}$,	68	7'0"	F
·· ··	70	8'0"	F	24/	67	10' 0"	M	,, ,,	71	16'0"	M
	66	6'0"	F	1	70	11'0"	M		71	11'0"	1
·· ··	71	7' 0"	M	·· ··	70	9' 0"	F	·· ··	73	10' 0"	M
	75	11'0"	M		70	11'0"	M	** **	72	5' 0"	Μ
""""" """""	70	8' 0"	M	** **	70	6'0"	Μ	·· ··	79	8'0"	M
·· ··	73	10'0"	F	** **	76	3' 8"	M	·· ··	67	9'0"	M
	71	8'0"	$\overline{\mathbf{F}}$	** **	73	12' 7"	M	** **	74	7'0"	M
·· ··	69	8' 0"	M	²⁵ / ₂ "	73	14'0"	M	³ / ₃ ",	73	12'0"	M
·· ··	73	3' 0"	M	1	74	3'0"	M	11	73	18'0"	F
·· ··	70	5' 0"	M	** **	73	5' 0"	M	** **	74	14'0"	M
18/2 ,,	73	2' 0"	M	·· ··	70	2'0"	F	,, ,,	76	12'0"	M
/2 ,,	76	13'0"		"""" """"	74	10'0"	M	·· ·· ·· ··	72	12'0"	F
27 29			, ,	· · · · ·				., ., .,	•		•

Da whe		Lei	ngth.	Gora	Da		Ler	gth.		Da		Ler	igth.	
measu		Mother.	Foetus.	Sex.	wh measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
³ /3	46	68	2'0''	\mathbf{F}	10/3	46	72	17'0"		¹⁹ /3	46	76	9'0"	М
,,	"	69	12' 2"	M	,,	"	74	14'0''		,,	••	73	8'0"	\mathbf{F}
,,	"	69	8'1"	F	,,,	,,	74	4'6"	M	1	**	73	15'0"	F
**	"	$\begin{array}{c c} 72\\70 \end{array}$	5'9'' 12'0''	F M	33	"	$\begin{array}{c} 72 \\ 70 \end{array}$	11′0″ 8′0″	M	20/3	,,	69 60	5'0"	F
**	"	69	7'0"	F	"	"	70	8'0″	M F	"	"	69 71	9'0" 6'0"	M
" "	" "	75	4'0"	M	••	"	75	16'0"	M	"	**	78	8'0"	м
,,	"	69	7' 0"	Μ	,, ,,	"	74	10' 0"	F	21/3	,, ,,	71	1Ĩ′ Õ″	M
	,,	78	6' 0"	F	,,	,,	70	4'0''	\mathbf{F}		,,	74	7'0"	F
4]/3	,,	78	15'0"	M	,,	,,	70	11'0"	M	²² /3	,,	73	10' 2''	M
,,	"	$\begin{array}{c} 70 \\ 74 \end{array}$	10'0" 11'0"	F F	,,	"	67	9'0"	F	,,	,,	71	8'4"	F
"	"	75	11'0'' 12'0''	F	"	"	$\begin{array}{c c} 72\\ 67\end{array}$	$\frac{12'0''}{8'0''}$	M F	23/3	"	78 76	3' 0" 7' 0"	F F
"	"	72	$\frac{12}{4'0''}$	F	11/3	"	71	5'0"	F		"	80	9'0"	ъ
,, ,,	,, ,,	76	13'0"	F	/3 ,,	"	73	15' 0"	F	**	"	69	18'6"	F
,,	,,	65	8'0"	Μ	,,	" "	73	13' 0"	F	" "	" "	67	7' 6"	$\mathbf{\tilde{F}}$
		70	<i>∫</i> 10′ 0″	F	,,	"	71	9'0"			,,	69	8' 0 "	\mathbf{F}
,, 5/	,,	78	10'6"	F	,,	,,	$\frac{68}{72}$	13'0"	M	²⁴ /3	,,	71	10'0"	F
⁵ /3	,,	71	8′0″ 10′0″	M F	,,	,,	$\begin{array}{c} 72 \\ 70 \end{array}$	$14'0'' \\ 15'0''$	M M	25/3	"	69 74	17′ 6″ 15′ 0″	F
,,	,,	71	11'0"	F	,,	"	70 74	15''' 14''''''''''''''''''''''''''''''''''''	M	$\frac{26}{3}$	"	74 77	15 0 10'0"	М
" "	" "	$\overline{72}$	9'0"	F	"	"	75	110' 0''	M	$\frac{1}{27/3}$	"	74	10'0"	F
,,	"	71	11'9"	M	" "	" "	72	7'0"	F	,,	" "	72	7'9"	M
	,,	71	10'0"	Μ	,,	,,	75	11'0"	M	,,	"	75	18' 0"	Μ
⁶]′3	,,	73	6'0"	M		"	71	9'0"	M		,,	73	16' 0 "	\mathbf{F}
,,	"	$\begin{array}{c} 67 \\ 74 \end{array}$	3′ 9″ 6′ 6″	M F	12/3	,,	75	7'0'' 9'6''	F	²⁸ /3	••	74	4'0''	F
"	"	$74 \\ 75$	8'0"	F	"	"	68 66	90 10'0"	M M	,,	"	$\begin{array}{c} 68 \\ 72 \end{array}$	15′ 0″ 8′ 0″	F
,, ,,	,,	68	4'0"	F	"	"	70	10'0'' 14'0''	ш	"	"	70	14'0"	
,,	"	69	5'0''	F	,, ,,	" "	70	$\bar{4}'0''$	F	29/3	"	70	10' 0"	F
••	,,	71	14'0"	\mathbf{F}	,,	,,	74	1 6′ 0″	Μ	,,	" "	73	9'0 "	
,,	,,	70	8'0 ″	\mathbf{F}	,,,	,,	73	11′4″	Μ	,,	,,	75	8'6"	
,,	,,	74	11′0″ 13′0″	F	,,	,,	75	6'6"	M	30/3	,,	67 50	10' 4"	F
7",3	,,	75 71	15 0	F F	"	"	$\begin{array}{c} 67 \\ 68 \end{array}$	${3'2''\over4'8''}$	M F	$\frac{30}{3}$,,	$\begin{array}{c} 78 \\ 72 \end{array}$	21′ 0″ 9′ 0″	F M
	,,	73	3' 0"	M	"	,,	73	$\frac{4}{5'0''}$	F	$\frac{1}{4}$	••	74 74	90 7′0″	F
" "	,, ,,	73	8' 0"	M	,, ,,	"	74	5'0"	F	$\frac{\frac{1}{2}}{4}$	**	74	18' 0"	M
,,	,,	71	4'0"	M		" "	68	11'0"	M	3/4	" "	69	5'10"	F
"	,,	72	19'0"	Μ	13/3	,,	70	11'0"	F	,,	"	68	15'0''	M
,,	,,	74	16' 6'' 7' 0''	M	,,	,,	70	6'0''	F	4/4		75	10' 0"	М
••	"	$\begin{array}{c c} 73 \\ 74 \end{array}$	13'8"	M F	"	,,	$\begin{array}{c} 70 \\ 72 \end{array}$	7′ 0″ 10′ 0″	M	,,	" "	70	16'0''	F
8]/3	"	65	7'0"	M	**	"	75	10'0'	F	,,	,,	75	16'0"	F
,,	" "	70	7'0"	M	14/3	" "	70	11'0"	$ \mathbf{\hat{F}} $	5/4		77	17'0"	
,,	"	70	7'0"	F	,,	"	74	15'6''	F	,,,	" "	72	5'0''	F
,,	,,	66	12'0''	\mathbf{F}	••	,,	71	9′0″	M	,,	,,	71	13' 0"	M
9"/3	,,	76	9' 4"	M	$\frac{15}{3}$,,	71	11'0"	M	,,	,,	72	14′ 0″	\mathbf{F}
°/3	,,	$\begin{array}{ c c } 72 \\ 71 \end{array}$	9′ 6″ 3′ 3″	M M	$16/_{3}$,,	69 76	6'0'' 12'0''	F	6/4	"	72	13'0"	М
,,	,,	73	16'0"	141	,,	,,	$\begin{array}{c} 76 \\ 75 \end{array}$	12 0 8'0"	F M	,,	,,	66	9′0″	\mathbf{F}
,, ,,	,, ,,	71	10'0"	M	••	,,		(17'0"	M	7/4		75	16′ 0″	M
,,	,,	75	11'0"	\mathbf{F}	17/3	"	77	{11'0"	F	,,	" "	76	6'6"	
,,	,,	72	11'0"	F				9'0"	M	8/4		71	16' 0"	F
,,	,,	71	6'0" 7'0"	F	"	,,	74	13' 8"	F		"	77	14'0"	M
"	"	$\begin{array}{c c} 72\\70 \end{array}$	6'0"	M F	"	"	$\begin{array}{ c c c } 71 \\ 72 \end{array}$	10' 6" 12' 0"	M F	" 9/	"	74	3'0"	F
,, 	"	73	7'0"	F	18/3	"		11'5"	г F	9/4	"	68	10'0"	M
10/3	,, ,,	69	13'0"	M	19/3	" "	70	11'0"	F	"	" "	68	13'0"	F
					10	/3	•	•		, ,,	**			

Table No. 7.-Fin-whale foetuses (cont.).

Table No. 7.—Fin-whale foetuses (cont.).

Date when	Ler	ngth.	Sex.	Dat		Ler	ngth.	Sex.	Date when	Lei	ngth.	Sex.
measured.	Mother.	Foetus.	DCA.	measu		Mother.	Foetus.	JCA.	measured	Mother.	Foetus.	JUX.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
¹⁰ / ₄ 46	76 73	6′ 0″ 10′ 5″	M F	¹² /4	4 6 ,,	66 75	15′ 0″ 10′ 0″	M F	$\frac{14}{4}$ 46	78 71	14′0″ 16′0″	F M

Total 813 fin-whale foetuses, of which 394 males and 347 females. Sex was not stated for 72 foetuses. Of the 741 foetuses for which sex was stated, 53.17 per cent were males and 46.83 per cent were females.

Date	Lei	ngth.	Rom
when measured.	Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.	
$^{13}/_{12}$ 45 $^{14}/_{12}$,,	$50\\47$	0′ 8″ 1′ 0″	M M

Humpback foetuses.

Total 2 humpback foetuses, both males.

Sei-whale foetuses.

Date when	Ler	ngth.	Sex.	Dat		Ler	ngth.	Sex.	Date when	Lei	ngth.	Sex.
measured.	Mother.	Foetus.	Sex.	measu		Mother.	Foetus.	Bex.	measured.	Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
³⁰ / ₁ 46	54	10′ 0″	\mathbf{F}	16/3	46	49	7'0″	M	²⁵ / ₃ 46	54	10′ 0″	M
$\frac{1}{2}, \frac{1}{2}, \frac$	53	7' 0"	\mathbf{F}	17/3	,,	47	8'0"	\mathbf{F}	³¹ / ₃ ,,	52	13'0"	\mathbf{F}
$\frac{22}{2}$,	49	6'0"	M	18/3	,,	57	7' 0"	F	$\frac{3}{4}$,	54	14'0"	\mathbf{F}
⁸ /3 ,,	52	5'0"	\mathbf{F}	20/3		54	11'0"	\mathbf{F}	7/4 ,,	55	10'0"	M
,	53	§ 7′0″	M	23/3	,,	46	8'0"		¹² /4 ,	53	14'0"	\mathbf{F}
» »	05	§ 8'0"	M	,,	,,	51	5' 0"	M	,, ,,	53	6'0"	M
⁹ / ₃ ,,	50	4'0 "	M	,,	,,	53	6'0"	F	14/4 ,,	50	11'0"	F
$\frac{16}{3}$ ",	51	7'0"	M	,,	,,	54	9' 0"	М	,, ,,	51	9'0"	\mathbf{F}

Total 24 sei-whale foetuses, of which 11 males and 12 females. Sex was not stated for 1 foetus. Of the 23 foetuses, for which sex was stated, 47.83 per cent were males and 52.17 per cent females.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet. 70 71 72 73 74 75 76 77 78 79 80 81 82 83	$ \begin{array}{c} 1 \\ - \\ 2 \\ 5 \\ 6 \\ 10 \\ 13 \\ 22 \\ 22 \\ 18 \\ 14 \\ \end{array} $	Engi. feet. 84 85 86 87 88 89 90 91 92 93 94 Total	$ \begin{array}{c} 28\\ 24\\ 28\\ 14\\ 20\\ 13\\ 7\\ 6\\ 7\\ -\\ 1\\ 262 \end{array} $	Number of foetuses meas- ured

Fin-whale females.

61 62 63 64 65 66 67 68 69 70	$ \begin{array}{r} 1 \\ 4 \\ $	73 74 75 76 77 78 79 80 81	$105 \\ 70 \\ 58 \\ 37 \\ 17 \\ 13 \\ 4 \\ 4 \\ 1$	Number of foetuses mea- sured
71 72	96 86	Total	807	measured 3,441, of which pregnant animals 800, or 23.25 per cent.

Humpback females.

47	1	Number of foetuses measured 2
48	_	Total number of humpback females measured 116, of which
49		pregnant animals 2, or 1.72 per cent. Total number of ma-
50	1	ture humpback females (above 40 feet) measured 74, of which
Total	2	pregnant animals 2, or 2.70 per cent.

Sei-whale females.

46 47 48 49 50 51	$\frac{1}{2}$	53 54 55 56 57	5 5 1 - 1	Number of foetuses meas- ured 24 of which twin pairs 1
52	2	Total	23	

Table No. 9.—Whale foetuses measured in the Antarctic in the season 1945/46, by species and groups of size, in each month. Blue-whale foetuses.

Groups of size.	Nov.	Dec.	Jan.	Febr.	March.	April.	Total.
Engl. feet.		1			1		
Less than $1'$		1	_	_	_	_	1
$1' - 1' 11'' \dots \dots$	1	4	_	-	-	_	5
$2' - 2' 11'' \dots$	1	1	1	- 1	-	-	3
3' 3' 11"	2	11	4	-		-	17
4' 4' 11"	3	11	8	1	-		23
$5' - 5' 11'' \dots$	1	9	10	4			24
$6' - 6' 11'' \dots \dots \dots \dots$	2	9	11	3	1	-	26
7' 7' 11"		4	12	5	-	-	21
8' 8' 11"		4	11	5	-	-	20
9'- 9' 11"	-	4	5	4	2	-	15
10′—10′ 11″	-		5	4	5	-	14
11′—11′ 11″	-	3	8	5	2	-	18
12′—12′ 11″			8	7		1	16
13′13′ 11″		-	7	5	-	~	12
14'-14' 11"	-	~	3	3	4		10
15′—15′ 11″	-	-		2	3		5
16′—16′ 11″	-	-	1	5	2		8
17′—17′ 11″		- 1	1	3	1	~	5
18′—18′ 11″	-	-		7	1	-	8
19′—19′ 11″		-	2	2	-	-	4
20′20′ 11″	-	-		1	2	1	4
21′—21′ 11″	-	-		1	1		2
22′—22′ 11″		-		-	1		1
Total blue-whale foetuses	10	61	97	67	25	2	262
Average size of foetuses	4'0"	5' 4"	8' 5"	12'1''	13′ 10″	16' 0"	9' 1"

Fin-whale foetuses.

Groups of size.	Oct.	Nov.	Dec.	Jan.	Febr.	March	April	Total
Less than 1'	_	_	1	1	_		_	2
1'-1'11''	-	2	4	15	3	1	-	25
2'- 2' 11"		5	10	18	13	1	-	47
3'- 3' 11"	-	2	16	29	19	5	1	72
4' 4' 11"	1	5	12	34	16	10	-	78
5' 5' 11"	-		9	36	19	8	2	74
6'- 6' 11"	-	1	10	39	25	11	2	88
7' 7' 11"	-	-	9	23	17	17	1	67
8′— 8′ 11″		-	3	24	30	21	-	78
9′— 9′ 11″	-	-	6	23	19	18	1	67
10′—10′ 11″	~	-	1	15	22	19	4	61
11′11′ 11″		-		8	16	21	-	45
12'-12'11''	-	-	1	7	16	11	-	35
13′—13′ 11″		-	-		8	7	3	18
14′—14′ 11″			-	1	8	7	3	19
15'-15'11''					3	8	2	13
16'—16' 11"		-	-	-	1	7	5	13
17′—17′ 11″				-	-	3	1	4
18′18′ 11″				-	1	3	1	5
19′—19′ 11″		-		-	- 1	1	-	1
20′-20′ 11″	-	-	-	- 1	-	-	-	-
21′—21′ 11″	-	-	_	-	-	1		1
Total fin-whale foetuses	1	15	82	273	236	180	26	813
Average size of foetuses	4'0"	3'1"	5'0"	6'0"	7'9"	9'7"	11' 10"	7'4"

Table No. 9 (continued).

Groups of size.	Dec.
Engl. feet.	
Less than 1' 1'1' 11"	1 1
Total humpback foetuses Average size of foetuses	0′ 10″

Humpback foetuses.

Sei-whale foetuses.

Groups of size.	Jan.	Febr.	March.	April.	Total.
Engl. feet.					
Less than 1'		-	-		-
1'-1'11''				-	
2'— $2'11''$		-	-	-	
$3' - 3' 11'' \dots$			-	-	-
4'-4'11''	-	-	1	-	1
$5' - 5' 11'' \dots$	-	-	2	-	2
$6' - 6' 11'' \dots \dots$	-	1	1	1	3
7' 7' 11"		1	4	-	5
8′— 8′ 11″	-	-	3	-	3
$9' - 9' 11'' \dots$	_	-	1	1	2
10′—10′ 11″	1	- 1	1	1	3
11′—11′ 11″	-	-	1	1	2
12'-12'11''	-	-	-	-	
13′—13′ 11″	-	-	1	-	1
14'-14' 11"			_	2	2
Total sei-whale foetuses	1	2	15	6	24
Average size of foetuses	10'0"	6' 6"	7'8"	10' 8"	8'5"

Table No. 10.—Whale foetuses measured in the Antarctic in the season 1945/46, by species and sex, in each month.

Kind of foetuses.	Nun	ber of	Sex not	Total	Number of males per 100 females.	
Months.	males.	females.	stated.	foetuses.		
Blue-whale foetuses.						
November	5	5	-	10	100	
December	27	32	2	61	84	
January	54	42	1	97	129	
February	3 0	35	2	67	86	
March	8	16	1	25	50	
April	1	-	1	2	_	
Total	125	130	7	262	96	

Kind of foetuses.	Nun	ber of	Sex not	Total	Number of males per 100	
Months.	males.	females.	stated.	foetuses.	females.	
Fin-whale foetuses.						
October		1		1	-	
November	4	11	-	15	36	
December	41	23	18	82	178	
January	144	110	19	273	131	
February	117	101	18	236	116	
March	77	88	15		88	
April	11	13	2	26	85	
Total	394	347	72	813	114	
Humpback foetuses.						
December	2			2		
Total	2			2		
Sei-whale foetuses.						
January		1	_	1	_	
February	1	i		$\overline{2}$	100	
March	8	6	1	15	133	
April	2	4	-	6	50	
Total	11	12	1	24	92	

Table No. 10 (continued).

