INTERNATIONAL WHALING STATISTICS XVII

EDITED BY

THE COMMITTEE FOR WHALING STATISTICS



OSLO 1947

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PREFACE

Before the second world war the Committee each year published two separate publications, one containing the statistics for the Antarctic operations and the other including operations all over the world.

At the outbreak of the second world war these publications had to be suspended, as particulars of the catch were not available.

In 1941, in order to provide a detailed survey of the results of the whaling statistics for the period 1909/10—1938/39 the Committee issued publication No. XVI.

The present publication (No. XVII) contains statistics for the Antarctic season 1939–40 and for the whaling operations which took place during the war all over the world. The material collected from the various countries is not quite complete, but the Committee hopes to be able to obtain the missing statistics later. It will then be printed in a later publication of the International Whaling Statistics.

The official documents containing the protocol and final act of the conferences for the International Regulation of Whaling, held in London May/June 1937, June 1938, July 1939, January/February 1944, and November 1945, are reproduced in extenso on pp. 26*-66*.

The issue of the present publication has been considerably delayed owing to printing difficulties.

Oslo, 20th December 1946.

Gunnar Jahn. Birger Bergersen. Harald B. Paulsen.

INTRODUCTION

The world war from September 1939 to May 1945 was a severe blow to the whaling industry. Operations had to be discontinued in many of the usual fields; floating factories, and catchers were converted to serve war purposes. Many floating factories were lost. This was the case with floating factories actually engaged in whaling as well as with floating factories employed for transport. The fleet of catchers also suffered heavy losses.

The available catching equipment after the war was therefore considerably reduced and for this reason, in the first year of peace, whaling activities have not assumed the same proportions as before the war.

During the war whaling has been carried on every year, but on a considerably reduced scale.

A survey of whaling operations from 1933-34 to 1944-45 is given in table *a*

	All whaling grounds.			Antarctic.			Others.		
Years.1	Shore stations.	Floating factories.	Catchers.	Shore stations.	Floating factories.	Catchers.	Shore stations.	Floating factories.	Catchers.
1933–34	15	23	199	2	19	126	13	4	73
1934 - 35	13	30	242	$\frac{2}{2}$	$\frac{13}{23}$	120	16	-7	89
1935 - 36	38	33	312	$\frac{1}{2}$	$\frac{23}{24}$	175	36	9	137
1936-37	29	41	354	$\overline{2}$	30	196	27	11	158
1937-38	35	35	356	$\overline{2}$	31	256	33	4	100
1938 - 39	14	37	358	2	34	281	12	3	77
1939-40	6	29	302	2	28	240	4	1	62
1940-41	4	14	167	1	11	93	3	3	74
1941 - 42	5	1	26	2	-	12	3	1	14
1942 - 43	5	1	23	1	- 1	6	4	1	17
1943-44	6	1	28	1	1	15	5	-	13
1944 - 45	6	1	30	1	1	15	5	-	15

Table a.-Whaling equipment in operation in the years 1933/34-1944/45.

¹) 1933-34 = Antarctic season 1933-34 and summer 1934, a.s.o.

As this table shows, whaling operations were only slightly reduced in the first season of the war 1939–40, whereas there was a heavy decline in 1940–41. However, it is only from the 1941–42 season that the full effects appear. It will be observed that operations from floating factories in the Antarctic were entirely broken off in the seasons 1941–42 and 1942–43. Whaling in other fields, although also considerably reduced, never reached the same low point as in the

Antarctic. The total result has been a very considerable diminution of the number of whales killed, as shown in table b:

Years.1)	Total number of whales killed.	Years.	Total number of whales killed.
1933–34	32,586	1939-40	37,379
1934–35	39,311	1940-41	23,174
$1935 - 36 \dots \dots$	44,855	1941-42	6,120
1936–37	51,379	$1942 – 43 \dots \dots$	6,167
1937–38	54,835	$1943-44\ldots$	3,883
1938–39	²) 45.629	$1944-45\ldots$	4.842

Table b.-Whales killed in the years 1933/34-1944/45.

¹) 1933-34 = Antarctic season 1933/34 and summer 1934, a.s.o. ²) The figure is not quite complete as no information has been available re. the catch off New Zealand during summer 1939.

The figure for 1943–44 which refers to the Antarctic season 1943–44 and the summer 1944, shows that only 3,883 whales were killed. A lower figure than this has not been registered since 1905–06.

When the total catch is divided according to fields of operation, as shown in table c:

	All are	as.	Antarctic.		North Atlantic and Arctic.		Afric	a.	Pacifi nortl		Japan.		Other	s.
Years.	No. of whales killed.	Per cent.	No. of whales killed.	Per cent.	No. of whales killed.	Per cent	No. of whales killed.	Per cent.						
1933-34	20 506	100	96 007	00.1	#09	1.0	0.900	- 9	1 010	3.1	1 496	4.4	1,069	3.3
1933 - 34 1934 - 35			26,087		583		2,392	7.3	1,019		1,436			1
			31,808				3,004	7.7	855	2.2	1,787	4.5	1,289	
1935-36			30,991		722	1.6	3,768	8.4	857	1.9	1,840	4.1	6,677	
1936 - 37			34,579			3.7	3,966	7.7	730	1.4	2,066		8,128	
1937 - 38	54,835	100	46,039	84.0	750	1.4	3,044	5.6	483	0.9	1,970	3.6	2,549	4.5
1938 - 39	¹)45,629	100	38,356	84.1	802	1.7	2,687	5.9	232	0.5	2,280	5.0	$^{1})1,272$	2.8
1939-40			32,900		78	0.2	1.035	2.8	702	1.9	2,035		629	1.7
1940-41	23.174					0.3	759	3.3	603	2.6	2,349		3,039	13.1
1941 - 42	6,120						498		26	0.4			4.061	
1942 - 43	6,167	100	998	16.2	261	4.2	724	11.7	29	0.5		-	4,155	67.4
1943-44	3,883	100	1,799	46.3	346		819	21.1	5	0.1	_	-	914	23.6
1944-45	4,842							9.2	-	_	-	-	1,096	

Table c.-Whales killed in the different main areas 1933/34-1944/45.

¹) The figure is not quite complete, as no information has been available re. the catch off New Zealand during summer 1939.

it appears that—apart from operations in the North Pacific, which gradually came to an end, and off the coast of Japan and Corea—the biggest relative reduction in the catch was in the Antarctic, where only 998 whales were killed in 1942–43. In the Antarctic such a low total has only been registered in the first two years of whaling activities in that area, viz. 1904–05 and 1905–06.

The table also shows that the fields grouped together under the title "Others" have been much more important than before the war, and this fact is explained

by the catch of sperm-whales off the South American coast, which assumed not insignificant proportions.

It is a familiar fact that operations in the Antarctic have been the most important for many years. This is reflected in the figures for whales killed and is still more impressively brought out when the output of whale oil, which is the main product, is used as a scale of comparison, as shown in table d:

	All whalin	g grounds.			Principal	grounds.				
Years.	All whath	ig grounds.	Anta	retie.	Arc	tic.	Afr	ica.		
	Total oil output.	Oil output per catcher.	Oil output.	Oil output per catcher.	Oil output.	Oil output per catcher.	Oil output.	Oil output per catcher.		
	Barrels.1)	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.		
1933 - 34	2,588,335	13,007	2,395,544	19,012	16,038	1,234	82,359	3,922		
1934 - 35	2,692,825	11,127		16,039	15,341	902	117,950	4,369		
1935 - 36	2,873,423	9,210	2,436,338	13,922	22,203	1,009	135,081	3,141		
1936 - 37	3,214,510	9,081		13,562	69,144	1,921		4,353		
1937 - 38	3,640,248	10,225	3,340,330	13,048	22,097	1,004		6,323		
1938 - 39	²) 3,007,4 09	8,520		10,038	26,066	1,241	106,793	5,085		
1939 - 40	2,656,303	8,796		10,601	2,950	2,950		3,674		
1940 - 41	1,250,575	7,488	1,100,008	11,828			26,638	5,328		
1941 - 42	179,986	6,923	77,819	6,485	<u> </u>	-	19,740	3,948		
1942 - 43	171,977	7,477	50,960	8,493	3,920	3,920	27,373	$5,\!475$		
1943 - 44	195,653	6,988	132,001	8,800	7,200	2,400	29,380	5,876		
1944 - 45	281,677	9,389	223,540	14,903	8,660	1,237	15,348	3,070		
1933–34	Per cent	100.0	Per cent	92.6	Per cent	0.6	Per cent	3.2		
1934 - 35		100.0		91.1		0.5		4.4		
1935 - 36		100.0		84.8		0.7		4.7		
1936 - 37		100.0		82.7		2.2		5.3		
1937 - 38		100.0		91.8		0.6		3.8		
1938 - 39		100.0		94.2		0.9		3.5		
1939 - 40		100.0		95.8		0.1		1.5		
1940-41		100.0		88.0		_	Page State Fu	2.1		
1941 - 42		100.0		43.2				11.0		
1942 - 43		100.0		29.6		2.3		15.9		
1943 - 44		100.0		67.5		3.7		15.0		
1944-45		100.0		79.4		3.1		5.4		

Table d.—Whale-oil production in the years 1933/34—1944/45.

¹) Barrel = $\frac{1}{5}$ ton (1 ton = 1.016 kg). ²) The figure is not quite complete, as no information has been available about the catch off New Zealand during summer 1939.

Antarctic.

On account of the particular interest which attaches to the operations in the Antarctic, it seems appropriate to give some detailed information not only about catching results in this area, but also to give an outline of what happened to the catching equipment during the years of war.

As a direct consequence of the outbreak of war in 1939, 4 German pelagic expeditions and 2 others operating under Norwegian flag for account of the Germans, did not go out in 1939–40.

Apart from these, all expeditions which were sent out in 1938–39, also took part in 1939–40, and in addition 1 African expedition joined in.

Flag	Floating factories	Shore stations	Catchers
Norwegian	10	_	79
British	10	1	87
Japanese	6	-	51
American (U.S.)	1		9
Panamanian	1	-	8
Argentine	-	1	6
Total	28	2	240

The total number of expeditions operating in the Antarctic in 1939–40 was divided as follows:

Apart from the German and Japanese catching material, most of the floating factories were—during the second world war—used for ordinary freight traffic in Allied service and the majority of the catchers were requisitioned by the British and Norwegian Governments for naval service.

Employment of the slow-going floating factories as freighters during the war had catastrophic results, as they became an easy prey for the submarines. The table below shows the total number of floating factories in existence in 1939 and their subsequent fate.

	Flag, number, and name of floating factories	Gross tons	Remarks
	Norwegian.		
1.	C. A. Larsen	13,246	Damaged during the war, but repaired and in operation in 1945–46. Renamed "Ant- arctic".
2.	Kosmos	17,801	Lost 26th September 1940.
3.	Kosmos II	16,966	Lost 28th October 1942.
4.	Lancing	7,866	Lost 7th April 1942.
5.	N. T. Nielsen-Alonso	9,348	Lost 22nd February 1943.
6.	Ole Wegger	12,201	Captured in the Antarctic 13th January 1941, sunk in the Seine, lifted again, but now condemned.
7.	Pelagos	12,083	Captured in the Antarctic 14th January 1941, found in Norway after the war in fairly good condition, and operating in 1945–46.
8.	Sir James Clark Ross	14,362	
9.	Skytteren	12,358	Lost 1st April 1942.
10.	Solglimt	12,246	Captured in Antarctic 13th January 1941 and sunk at Cherbourg.
11.	Strombus	6,549	Lost 26th October 1940.
	Suderøy	7,562	
	Thorshammer	12,215	
<u></u>	Total	154,803	

Flag, number, and name of floating factories	Gross tons	Remarks
British. 14. Anglo-Norse 15. Hectoria 16. New Sevilla 17. Polar Chief	. 13,797 . 13,801	Lost 11th Sept. 1942. Lost 21st » 1940. Factory plant has been removed and ship
18. Salvestria 19. Sourabaya 20. Southern Empress 21. Southern Princess 22. Svend Foyn 23. Tafelberg 24. Terje Viken 25. Uniwaleco Tota	$\begin{array}{c ccccc} . & 10,107 \\ . & 12,398 \\ . & 12,156 \\ . & 14,596 \\ . & 13,640 \\ . & 20,638 \\ . & 9,755 \end{array}$	converted to tanker. Lost 27th July 1940. Lost 27th Oct. 1942. Lost 13th » 1942. Lost 17th March 1943. Lost » 1943. Lost 8th Sept. 1944. Lost 7th March 1941. Lost
Japanese. 26. Nisshin Maru	. 16,764	All Japanese floating factories were lost during the war.
27. Nisshin Maru No. 2 28. Tonan Maru 29. Tonan Maru No. 2 30. Tonan Maru No. 3 31. Kyokuyo Maru Tota	$\begin{array}{c} & 9,866 \\ & 19,262 \\ & 19,209 \\ & 17,548 \end{array}$	
German. 32. Jan Wellem 33. Südmeer 34. Unitas	. 8,133	Sunk at Narvik, lifted again, but condemned. Probably lost. Found in Germany in fairly good condition and operated in the season 1945–46 for the British Ministry of Food. Renamed "Empire
35. Wikinger	. 14,526	Victory" and allocated to England. Found in Germany in fairly good condition and operated in the season 1945–46 for the British Ministry of Food, renamed "Empire Venture". Allocated to Russia and renamed
36. Walter Rau	. 15,000	"Slava". Found in Germany badly damaged; will be able to resume operations 1946–47. Allocated to Norway and renamed "Kosmos IV".
Tota	1 71,280	
<i>American (U.S.).</i> 37. Frango	. 6,400	Factory equipment has been removed and ship converted to tanker.
38. Ulysses	. 12,395	Factory equipment has been removed and ship converted to tanker.
Tota Panamanian.		-
39. Vestfold	. 14,547	Lost 20th January 1942.
<i>Russian.</i> 40. Aleut	. 5,055	Has never operated in Antarctic.
Chilean. 41. Indus B. F	. 3,564	Factory equipment removed and ship con- verted into a cargo carrier.

Flag	Floating factories
Norwegian British	8 lost, 5 intact 10 » 1 intact and 1 converted to tanker
Japanese German American (U.S.). Panamanian	6 » 3 » 2 intact
Russian Chilean	0 » 1 intact 0 » 1 converted to cargo carrier
Total	28 lost, 9 intact, 3 converted to tankers and 1 to cargo carrier.

As will be seen, the losses for the various nations are distributed as follows:

In the season 1940–41 3 Norwegian floating factories were operating with a total of 21 catchers, 2 British floating factories with altogether 16 catchers, 6 Japanese floating factories with altogether 51 catchers and 1 Argentine shore station with 5 catchers. Accordingly, the total participation in that season was 11 floating factories, 1 shore station and 93 catchers. As generally known 2 of the Norwegian floating factories and 11 catchers were captured by a German raider in the Antarctic in the said season. At the same time 1 Norwegian floating factory, which in that season was serving as a transport ship, was captured by the same raider.

In the season 1941–42 whaling operations were carried on by only 1 Argentine and 1 British shore station with a total of 12 catchers. The British station operated only for a short part of the season.

In the following years operations were carried on by the Argentine shore station in the seasons 1942–43, 1943–44 and 1944–45. The number of catchers employed during these seasons was 6, 7, and 7, respectively.

In the seasons 1943–44 and 1944–45 1 Norwegian floating factory was in operation.

In the above tables c and d the main results of Antarctic operations have been set out.

The different kinds of whales killed during the war are shown in table e next page.

The figures in this table indicate the result of operations, but it is not possible during a period such as this and with catching equipment so heavily reduced, to draw any conclusions from the result as to the incidence of the various kinds of whales in the field. Nor does the number of whales per catcher in any way indicate the result of operations under such abnormal conditions as existed during the war. Nevertheless, the figures show that the stock of whales has only been moderately taxed, and this is particularly so in the fields where pelagic whaling is carried on.

A collocation of figures showing the number of whales classified by kind, which have been killed during the war by pelagic expeditions, is reproduced in table f:

		٤	species of	whales	s caught.				Number
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Catch- ers.	of whales per boat.
1933–34	17.349	7.200	872	_	666	_	26,087	126	207
1934-35	16,500	12,500	1,965	2 66	577	-	31,808	153	208
1935-36	17,731	9,697	3,162	2	399	-	30,991	175	177
1936–37	14,304	14,381	4,477	490	926	¹) 1	34,579	196	176
1937–38	14,923	28,009	2,079	161	867	-	46,039	256	180
1938–39	14,081	20,784	883	22	2,585	¹) 1	38,356	281	136
1939–40	11,480	18,694	2	81	1,938	²) 705	32,900	240	137
1940-41	4,943	7,831	2,675	110	804	-	16,363	93	176
1941-42	59	1,189	16	52	109	-	1,425	12	119
1942-43	125	776		73	24	-	998	6	166
1943-44	339	1,158	4	197	101	-	1,799	15	120
1944-45	1,042	1,666	60	78	45	-	2,891	15	193

Table e.-Total Antarctic.

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

			Species	of whales	caught.				
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Catch- ers	Number of whales per boat.
1933-34	16,813	5,472	780	_	659		23,724	115	206
1934-35	15,944	11,664	1,928	141	556	-	30,233	143	211
1935-36	16,510	9,177	3,121	2	396	-	29,206	165	177
1936-37	14,183	13,302	4,460	19	856	¹) 1	32,821	184	178
1937-38	14,826	26,457	2,039	6	824	-	44,152	244	181
1938-39	13,849	19,477	883	3	2,468	¹) 1	36,681	270	136
1939-40	11,392	17,757	2	1	1,853	²) 704	31,709	228	139
1940-41	4,936	7,084	2,675	2 2	778	-	15,495	88	176
1941-42	-	·	-		-	-	-	-	-
1942-43		-	-		-	-	_	<u> </u>	-
1943-44	311	5 2 6	-		-	-	837	8	105
1944-45	914	679		2	-	-	1,595	8	199

Table f.-Pelagic whaling in the Antarctic.

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

It is also impossible to draw any definite conclusions from the catching results in the various months which are set out in table g next page.

It will be observed that this table only includes part of the catch. The reason for this is that it has not been possible to obtain more complete information.

In the International Whaling Statistics the number of whales killed has, as will be remembered, been classified by immature and mature specimens, but this division did not refer to the total number of whales killed. Although during the war only a limited supply of information has been available, some interest may still attach to the figures in table h.

Table h page 11 shows that the relative number of immature whales killed in 1940-41 is somewhat higher than usual, and this may seem to indicate a greater incidence of young animals. For the later seasons the figures are so small that it is hardly warranted to draw any conclusions from them.

Snecies	of whales	.		.		.		ch.	_	.		The Whal-
	seasons.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April	May.	Total.	ing Statis- tics' total figures.
	(1934-35		270	1,382	8,067	7,603	7,147	$5,\!492$	149	93	30,203	30,233
	1935-36	-	_	265	9,411	10,352	7,301	1,877	-	-	29,206	29,206
	1936-37	-	4	542	8,279		¹) 9,966	2,207	~	-	¹) 32,802	¹) 32,821
-	1937-38.	-	-	1,180	11,062	14,075	12,716	5,110	-1	-	44,143	44,152
Total	1938-39	-	-	1,353	10,138	12,626	9,986	¹) 2,562	-	-	¹) 36,665	¹) 36,681
animals.	1939-40	-	-	151	¹)4,079	6,020	5,509	1,417		-	¹) 17,176	²) 31,709
	1940-41	-	-	3 06	1,075	552	4	3 62	64		2,363	15,495
		-	-	-	-	-	-	-	-	-		-
	1943-44	-	-	-	-	143	307	326	61	-	837	
	1944-45	-	-	29	499	488	361	218	-	-	1,595	1,595
	(1934–35	_	2 70	928	6,183	4,474	2,572	1,430	55	<u></u>	15,912	15,944
	1935-36	_		100	6,874	5,244	3,311	981	-	_	16,510	
	1936-37	_	3	409	5,235	5,332	2,701	497	-		14,177	
	1937-38	_	_	678	6,873	4,405	2,051	819	-	-	14,826	14,826
Blue-	1938-39	-	-	846	5,124	4,899	2,368	60 2	-	-	13,839	13,849
whales.	1939-40	-	-		1,864	1,986	1,380	337	-	-	5,567	11,392
	1940-41		-	230	631	220	· -	11	3	-	1,095	4,936
	— —	-	-	-	-	-		-	~	-	-	-
	1943-44	-	-	_	_	74	89		7		311	
	[1944–45	-	-	7	321	318	172	96	-	-	914	914
	(1934–35	-	_	88	993	2,623	3,986	3,906	52		11,648	11,664
	1935 - 36	-	-	17	1,193	3,915	3,203		_		9,177	9,177
	1936-37	-	1	7	1,165	4,445	6,118	1,555	-		13,291	
	1937-38	-		24	3,210	9,079	10,131	4,007	_	-	26,451	26,457
Fin-	1938-39	-	-	64		6,959	7,061	1,788	-	-	19,477	
whales.	1939-40	-	-		1,773	3,760	4,054	1,054	-	-	10,641	
	1940-41	-	-	36	267	166	4	346	61		880	7,084
	1049 44	-	-	-		-	-	10-	~ .	-		
	1943-44	-	-	22^{-}	150	69	218		54	-	526	
	l 1944–45	-	-		178	170	187	122	-		679	
	<i>[</i> 1934–35		-	6			543		4	-	1,943	
	1935-36	-	-	4		1,107	749		-	-	3,121	
	1936 37	-	-	10		1,854	1,038		-	-	4,460	
Hump-	1937-38	_	_	233		513	474	237	-		2,039	
backs.	1938 - 39	-	-	134		235	58	-	-	-	883	
	1939-40 1940-41	-	-	30	2	100		1	-	-	$\begin{array}{c}2\\279\end{array}$	
	1940-41		-	30	120	128		1	_		218	2,015
		_	_						-			~~~
	$\begin{bmatrix} 1934 - 35 \\ 1005 & 96 \end{bmatrix}$	-	-	358	63	69	45		-	-	560	
	1935 - 36	-	-	142	130	86	38		-	-	396	
Sperm-	1936 - 37	-		116	417	173	97	51	_	-	854	- ·
whales.	1937–38 1938–39	-	-	$\frac{245}{309}$	397	78	60		-	-	$821 \\ 2,462$	·
unutes.	1939-40.	-	-	151	953	$\begin{array}{c} 533\\274\end{array}$	$499 \\ 74$	$\begin{array}{c} 168 \\ 26 \end{array}$	~		2,402	
	1939-40 1940-41	-		10	$439 \\ 57$	$\frac{274}{38}$	74	4	-	-	109	· · · ·
		_	_	- 10	- 57		_	T	_	_	- 100	
	(1934–35									0.0	140	141
	1934-35 1935-36	-	-	$\frac{2}{2}$	-	-	1	6	38	93		
	1935-36 1936-37	-	-	2	-	-	11	- 8	-		$\begin{vmatrix} 2\\ 19 \end{vmatrix}$	
~ .	1930-37 1937-38		-	-	-	-	11		-	-		
Sei-	1937-38		-		-	-	-	⁰ ¹) 4	-	-		$\frac{1}{1}$ $\frac{1}{2}$
whales.	1939-40			_		-	1	-) +	_	-	-) 4	
	1940-41.	_		_		-	-				- 1	22
			_		-		_	_		_	-	
	1944-45	_	_		-		2	_			. 2	2 2
		'										

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

	Table h		Antarctic, pelagic whaling.		Catch of immature and		mature wha	mature whales 1934/35—1944/45.	-1944/4	5.		
	1934-35.	1935-36.	1936-37.	193738.	1938—39.	193940.	1940—41.	1941 - 42, 1942 - 43.		194344.	194	194445.
b	Number of whales.	Number Per of whales. cent.	Number Fer of cent.	Number of whales.	Number of whales.	Number Per of whales.	Number Per of cent.	Number I of co whales.	Per Nu cent. wh	Number Per of cent.	Number of whales.	r Per cent.
Blue-whales.												
Immature males	2,058 24.56	2,369 26.50	2,133 29.14	1,825 23.57	1,916 27.53	765 26.73 876 39 46	$\begin{array}{c c} 191 & 36.80 \\ 194 & 33.68 \end{array}$	11	1 1	$46\ 31.08$ $47\ 28.83$		$110\ 25.64$ $151\ 31.13$
females animals	2,489 33.20 4,547 28.64					Γ,	385 35.16		 	93 29.90	0 261	1 28.56
$\substack{\text{Mature}\\\text{males}\dots\\formula}$	6,320 75.44 5 000 66 80	6,571 73.50 4 761 62.93	$5,186 70.86 \\4.258 62.09$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c} 2,097 \\ 1,823 \\ 67.54 \end{array}$	$328 63.20 \\382 66.32$	1 1 1		$\frac{102}{116} \frac{68.92}{71.17}$		$\frac{319}{334} \frac{74.36}{68.87}$
animals	$\frac{0,00}{11,329}$ $\frac{0.00}{71.36}$	11,3	9,444 66.61			3,920 70.49	710 64.84		1	218 70.10		653 71.44
Fin-whales. Immature males	1,055 17.07	1-1	1,015 13.61	2,175 14.96	2,089 20.04 9 099 20.04	1,036 18.23	$128\ 28.13\\120\ 28.24$	11	11	58 20.50 71 28.86		61 15.21 38 13.67
temales animals	$\frac{1,135}{2,190} \frac{20.93}{18.88}$	1,588 17.31	2,018 15.18			2,122 19.96	248 28.18			129 24.39		99 14.58
Mature males	5,126 82.93 4 983 79 05	3,996 83.35 3,592 81.97		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8,333 79.96 7,026 77.59	$\begin{array}{c c} 4,648 \\ 3,862 \\ 78.05 \end{array}$	$\frac{327}{305} \frac{71.87}{71.76}$	1 1	1 1	$\frac{225}{175} \frac{79.50}{71.14}$		$340 \\ 84.79 \\ 86.33 \\ 86.33$
animals	9,409 81.12			04	1	8,510 80.04	632 71.82	1	1	400 75.61		580 85.42
Humpbacks. Tmmature												
males	36340.33 33832.91	$395\ 31.45$ $574\ 30.83$	$\begin{array}{c} 789 \\ 35.80 \\ 940 \\ 41.67 \end{array}$	297 38.87 435 34.36	$\begin{array}{c} 177 \ 66.54 \\ 305 \ 49.43 \end{array}$	1 1	30 38.71 43 23.12			1 1		
animals	701 36.38	969 31.08	1,729 38.77	732 36.06	482 54.59	•	79 28.32	1	1	1	1	1
Mature males	537 59.67			-		1	57 61.29	1	1	l	1	
females	689 67.09	Ļ,				1	143 76.88	-	1	1		1
animals	1,226 63.62	2,149 68.92	2,731 61.23	1,298 63.94	401 45.41	-	189.17/002	-	Г	1.	-	

Whaling grounds and species of whales.	1934 - 3 5	$ \begin{array}{r} 1935 \\ -36 \end{array} $	1936 -37	1937 -38	1938 -39	$1939 \\ -40$	$1940 \\ -41$	1941 -42	$1942 \\ -43$	$1943 \\ -44$	1944 -45
Pelagic whaling.	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	78.99		79.70	79.57	76.69 79.74 78.17				79.87	76.34 79.29 77.91
Fin-whales. Males Females Total animals	$66.37 \\ 69.02 \\ 67.61$	69.43		69.72		68.96		-		$65.19 \\ 67.55 \\ 66.29$	68.89
Humpbacks. Males Females Total animals	$39.43 \\ 42.06 \\ 40.83$	42.26	$39.77 \\ 41.39 \\ 40.59$	41.95		-	10.7 -	-	-	-	-
South Georgia.											
Blue-whales, total Fin-whales, total Humpbacks, total Sperm-whales, total	$74.15 \\ 65.76 \\ 44.19 \\ 50.66$	$\begin{array}{c} 64.66\\ 40.29 \end{array}$	$\begin{array}{c} 63.56\\ 39.82 \end{array}$	$\begin{array}{c} 64.52\\ 41.53 \end{array}$	-			$72.96 \\ 64.65 \\ 42.83 \\ 48.25$	64.78 –		$73.38 \\ 65.36 \\ 42.03 \\ 48.91$

Table i.—Average size of whales killed in the Antarctic, by whaling grounds and species of whales 1934/35—1944/45.

Naturally, the same observations that were made in respect of table h also apply to the measurement of the size of the whales set out in table i. These measurements have been influenced by the minimum sizes that were fixed in the International Whaling Agreement of June 8th, 1937, which specified the minimum sizes as follows:

Blue-whales	70	\mathbf{feet}
Fin-whales	55	»
Humpbacks	35	»
Sperm-whales	35	»

In order to obtain a more reliable basis of comparison for the statistics of pelagic whaling, we have reduced the figures for all seasons from 1933–34 to 1944–45 by deducting all blue-whales less than 70', the fin-whales less than 55' and the humpbacks less than 35' in length. The result appears in table j on next page.

The average figures for blue-whales from the season 1933–34 up to the outbreak of the war have shown a downward tendency, whereas the average figures for the season 1940–41 show a considerable increase. In the seasons 1943–44 and 1944–45, however, the figures have again declined considerably, and the average for the last season is the lowest for the whole period from 1929–30 till 1944–45. The figures for fin-whales show generally the same tendency. But as

					0		-				
	$1933 \\ -34$	$1934 \\ -35$	$1935 \\ -36$	1936 -37	1937 -38	$1938 \\ -39$	$\begin{array}{c} 1939 \\ -40 \end{array}$	1940 -41	1941–42 and 1942–43	1943 -44	1944 -45
Blue-whales.	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		$78.59 \\ 81.30 \\ 79.87$		80.30	80.30	80.26	$77.21 \\ 80.30 \\ 78.72$	81.21	-	$75.88 \\ 79.96 \\ 78.03$	79.37
Fin-whales. Males Females Total animals		$\begin{array}{c} 66.46 \\ 69.08 \\ 67.69 \end{array}$	69.50		69.76		69.03	$64.91 \\ 68.03 \\ 66.42$	-	$\begin{array}{c} 65.28 \\ 67.61 \\ 66.37 \end{array}$	68.89
Humpbacks. Males Females Total animals		42.72	42.56	42.18	$39.92 \\ 42.22 \\ 41.36$	40.75	-	$40.75 \\ 43.31 \\ 42.45$	-	-	-

Table j.—Average size of whales killed, by species and sex 1933/34—1944/45, excl. of blue-whales less than 70', fin-whales less than 55' and humpbacks less than 35'. Antarctic, pelagic whaling.

whaling operations in the last 3 seasons (1940–41, 1943–44, and 1944–45) were on a very small scale, it is not permissible to draw any conclusions from those figures.

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°	»	70°	'east.
Area	\mathbf{IV}	»	70°	east	and	130° east.
Area	V	»	130°	»	»	170° west.

We have succeeded in finding out how the catch was divided according to this line of distinction in the period 1933/34-1944/45. The distinction has been maintained for nearly the whole catch except that for the seasons 1939-40 and 1940-41 information is missing regarding Japanese and British operations. The figures are given in table l page 14.

From the figures in this table the following summary statement has been prepared:

Areas	Blue-v	vhales	Fin-v	vhales	Hum	backs	Sperm-	whales	To	tal
Aleas	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
II III IV V	$23,570 \\ 41,849 \\ 33,251 \\ 1,201$	-	$36,676 \\ 19,109$	$37.37 \\ 19.47$	$6,170 \\ 6,003$	45.82	$2,816 \\ 2,436$	$41.83 \\ 36.18$	60,799	40.10
Total	99,871	100.00	98,146	100.00	13,467	100.00	6,732	100.00	218,216	100.00

Table k.-Number of whales killed in the seasons 1933/34-1944/45.

This contracted statement illustrates how the various kinds of whales were distributed on the areas concerned.

		Area II		T area I	Area III		- V	Area IV		Area V	Area V		All areas	All areas		
Species of whales.	Number		A verage size of		Dom gont	Average size of		. +	Average size of		Don cont	Average size of	Number of	Don cont	Aversge size of	
Seasons.	whales caught.	E.	the whales.	whales caught.	Fer cent.	the whales.	whales caught.	rer cent.	the whales.	whales caught.	rer cent.	the whales.	whales caught.	Fer cent.	the whales.	tor whates caught.
Blue-whales.			Eng. ft.			Eng. ft.			Eng. ft.			Eng. ft.			Eng. ft.	
1933-34	1,589	9.46	80.51	7,498	44.65	80.22	7,670	45.68	80.79	35	0.21	81.31	16,792		80.51	16,813
1934-35	2,224	14.01		8,229	51.83	77.31	5,423	34.16	80.17	1	I				78.57	15,944
1935-36	3,791	22.97		9,542	57.81	76.95	3,016	18.27	79.20	156	0.95	80.46		100	77.75	16,510
1936-37	4,158	29.33	78.45	4,940	34.84	77.26	5,079	35.83	76.93	I	ł	l	14,177	_	77.49	14,183
1937–38	2,821	19.06		6,223	42.04	78.40	5,757	38.90	78.23	1	1;			100	78.42	14,826
1938-39	3,440	24.86		4,469	32.29	77.24	4,920	35.55	78.92	1,010	7.30	79.72			78.11	13,849
1939-40	3,441	61.88	78.23	734	13.20	76.84	1,386	24.92	78.72	1	I	1	5,561	100	78.17	11,392
1940-41 ¹ · · · · · ·	188	80.46		214	19.04	18.02	1	1	İ	1	l	I	1,030	001	11.92	4,930
1943-44	311	100.00		1	1	I	1	1	i	1	-	I	311	8	77.93	311
1344-40	814 000	100.001					120.00	00 00				1			16.11	110 000 1
1933/34-1944/45	23,570	23.60	78.72	41,849	41.91	77.90	33,251	33.29	79.00	1,201	1.20	79.86	99,871	100	78.48	109,678
Fin-whales.																
1933–34	1,115	20.38		2,178	39.81	68.37	2,177	39.79	69.64	1	0.02	65.00	5,471	_	68.99	5,472
1934-35	2,246	19.36	68.23	7,985	68.84	67.08	1,368	11.80	69.64	1	I		11,599		67.61	11,664
1935-36	3,375	36.78		5,236	57.06	67.47	548	5.97	69.39	17	0.19	69.82	9,176		67.72	9,177
1936–37	6,004			5,002	37.64	68.08	2,285	17.19	67.31	1	I	1	13,291	100	67.80	13,302
1	11,505		67.63	8,297	31.41	67.89	6,610	25.03	68.21	I	I		26,412		67.86	26,457
1938–39	6,257			5,711	29.32	66.46	5,547	28.48	67.46	1,962	10.07	68.11	19,477		67.21	19,477
1939-40	7,840	73.74	67.39	2,218	20.86	66.88	574	5.40	67.49	1	I	ł	10,632	100	67.29	17,757
$1940-41^{1}$	831	94.43	66.19	49	5.57	67.41	1	1	I	1	1	I	088	8	66.26	7,084
1943-44	620		66.29	I	1	1	1	1	I	1	1	1	670	8	00.29 67.99	670 670
1941-40	0/6	- 1	01.33	1		1								Inu	01.00	610
1933/34-1944/45	40,381	41.14	67.60	36,676	37.37	67.42	19,109	19.47	68.14	1,980	2.02	68.12	98,146	100	67.66	111,598
Humpbacks.																
1933-34	113	14.68		86	11.17	37.37	571	74.15	40.82	1	1	l	770		40.09	780
$1934 - 35 \dots$	57	2.96		539	27.97	41.38	1,331	69.07	40.54	ţ	Berne	1	1,927		40.83	1,928
1935-36	288	9.24		1,888	60.55	41.34	938	30.08	41.78	4	0.13	43.00	3,118		41.43	3,121
1936–37	242	5.43		2,780	62.33	40.51	1,438	32.24	40.54	l		1	4,460	14	40.59	4,462
1937–38	335	16.50	40.96	829	40.84	41.01	866	42.66	41.17	l	1		2,030	100	41.07	
1938-39	I	I		1	I	1	859	97.28	39.63	24	2.72	39.79	883	100	39.64	
1940-41 ¹)	231	82.80	42.60	48	17.20	41.17	T	1	1	1	-		279	100	42.35	- 1
1933/34 - 1940/41	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
¹) Summary for 3 expeditions.	r 3 expedit	2)	whales a	caught in t	the season	1939-40	2 whales caught in the season 1939-40 are included	ed.		-						

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

14*

Another matter of interest is how the catch was distributed according to different species of whales. This is illustrated by the following figures for the period 1933/34–1944/45:

	Are	a II	Area	111	Area	a IV	Area	a V	Tota	,1
Kind of whales	No. of whales	Per cent	No. of whales	$\operatorname{Per}_{\operatorname{cent}}$	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent
Blue-whales Fin-whales Humpback-	$23,570 \\ 40,381$		$41,849 \\ 36,676$		33,251 19,109	$54.69 \\ 31.43$		$36.27 \\ 59.80$	99,871 98,146	$\begin{array}{c} 45.77\\ 44.98\end{array}$
whales Sperm-whales	$1,266 \\ 1,378$	$\begin{array}{c} 1.90 \\ 2.07 \end{array}$.,			$\begin{array}{c} 9.87\\ 4.01\end{array}$	$\begin{array}{c} 28\\102 \end{array}$	$0.85 \\ 3.08$		$\begin{array}{c} 6.17\\ 3.08\end{array}$
Total	66,595	100.00	87,511	100.00	60,799	100.00	3,311	100.00	218,216	100.00

Table m.-Number of whales killed in the seasons 1933/34-1944/45.

Statement have previously been published showing the number of floating factories and catchers taking part in pelagic whaling in the Antarctic. A supplement to these statements is given in table n.

Table n.—Number and gross tonnage of floating factories and catchers engaged in pelagic whaling in the Antarctic 1933/34—1945/46.

	F	loating facto	ries		Cate	chers	
Seasons		Gross	Average gross		Gross	Average pe	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	24	289,303	12,054	165	42,405	257	907
1936-37	30	370,380	12,346	184	51,888	282	1,028
$1937 - 38 \dots$	31	408,332	13,172	244	71,980	295	1,107
$1938 - 39 \dots$	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
	-	-	-	-	-	-	
$1943 - 44 \dots$	1	14,362	14,362	8	2,180	310	1,238
$1944 - 45 \dots$	1	12,215	12,215	8	2,180	310	1,238
$1945 - 46 \dots$	9	123,499	13,722	77	24,326	316	1,239

This statement illustrates the tonnage of the whaling fleet and the average strength in horse power of the catchers. The figures for the season 1945–46 are included, but apart from that, these statistics do not extend beyond the summer 1945. Statistics of operations in the Antarctic in the season 1945–46 are already finished and will be given in the next number of this publication. Only the following information is given here:

In the season 1945–46 6 Norwegian floating factories took part and 3 floating factories operated for British account. Further, 1 Argentine, 1 British and 1 Norwegian shore station operated from South Georgia in 1945–46.

The whaling season for the pelagic expeditions was fixed, pursuant to the International Whaling Agreement of 1944, at 4 months, from 24th November 1945 to 24th March 1946. However, as all the expeditions, except one, did not arrive at the grounds in time to begin on the aforementioned date, they were, in accordance with the Supplementary Protocol of 1945–46, allowed to operate after 24th March, but with the proviso that the expeditions in question should not operate for a longer total period than 4 months.

According to the reports sent in to the Committee for International Whaling Statistics the total catch for the Antarctic season 1945–46 amounts to 13,387 whales and 818,652 barrels of oil.

It is well known that when whaling started in the Antarctic, it was carried out from shore stations. Since the beginning of the thirties only shore stations at South Georgia have been in activity. Apart from the seasons 1939–40 and 1941–42 it is only the Argentine shore station at South Georgia that has carried on whaling during the war. During the two seasons mentioned 1 British shore station was also operating, but in 1941–42 only for a short time. The result obtained was 25,350 barrels of oil in 1939–40 and 17,000 barrels in 1941–42.

The figures showing the catch off South Georgia are given in table o.

		1	Species o	f whale	s caught	•			E	xpedition	s.	Number
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	of whales per boat.
						1	1	Barrels.			1	1
1933 - 34	536	1,728	92		7	-	2,363	132,187	2	-	11	215
1934 - 35	556	836	37	125	21	-	1,575	108,141	2	-	10	158
1935 - 36	1,221	520	41		3	-	1,785	143,185	2	-	10	179
1936-37	121	1,079	17	471	70	-	1,758	81,629	2	-	12	147
1937 - 38	97	1,552	40	155	43	-	1,887	90,266	2	-	12	157
1938 - 39	232	1,307	-	19	117	-	1,675	111,490	2	-	11	152
1939 - 40	88	937	-	80	85	¹) 1	1,191	64,782	2	- 1	12	99
1940 - 41	7	747	-	88	26	- ¹	868	44,498	1	-	5	174
1941 - 42	59	1,189	16	52	109	-	1,425	77,819	2	-	12	119
1942 - 43	125	776	-	73	24	-	998	50,960	1	-	6	166
1943-44	28	632	4	197	101	-	962	50,001	1	-	7	137
1944 - 45	128	987	60	76	45	-	1,296	75,540	1	-	7	185

Table o.-South Georgia.

1) Right-whale.

The table shows that the catch off South Georgia has been comparatively well maintained during the war. However, the number of whales killed per catcher has varied very greatly, and generally speaking the share of the bluewhales in the total catch has fallen since previous years.

Table p page 17 shows the catch per month.

Table q page 18 shows the distribution according to immature and mature whales.

17*

Table p.—South Georgia. Catch by months.

Species of whales and seasons.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	Total.	The Whal- ing Statis- tics' total figures.
$Total \begin{cases} 1935-36\dots \\ 1936-37\dots \\ 1937-38\dots \\ 1938-39\dots \\ 1939-40\dots \\ 1939-40\dots \\ 1940-41\dots \\ 1$	·	187 81 33 51 8 -	$399 \\ 204 \\ 131 \\ 240 \\ 124 \\ -$	$437 \\ 289 \\ 421 \\ 453 \\ 318 \\ - \\ 105$	$463 \\ 369 \\ 659 \\ 332 \\ 341 \\ -$	$299 \\ 316 \\ 333 \\ 218 \\ 218 \\ -$	$ \begin{array}{r} - \\ 307 \\ 203 \\ 343 \\ 172 \\ - \\ 170 \\ \end{array} $	192 107 38 10		1,785 1,758 1,887 1,675 1,191	$ \begin{array}{c} 1,758\\ 1,887\\ 1,675\\ 1,191\\ 868 \end{array} $
1941-421942-431943-441944-45	·	5 - - -	$87 \\ 91 \\ 25 \\ 91$	$185 \\ 238 \\ 171 \\ 436$	237 292 211 332	$ 118 \\ 107 \\ 177 \\ 150 $	$179 \\ 162 \\ 110 \\ 156$	$61 \\ 92 \\ 121 \\ 126$	$16 \\ 7 \\ 5$	$872 \\ 998 \\ 822 \\ 1,296$	
$Blue = \begin{cases} 1935-36. \\ 1936-37. \\ 1937-38. \\ 1938-39. \\ 1939-40. \\ 1940-41. \\ \end{cases}$		$ \begin{array}{r} 175 \\ 9 \\ 4 \\ - \\ 1 \\ - \\ - \\ 1 \end{array} $	$ \begin{array}{r} 368 \\ 66 \\ 3 \\ 7 \\ 33 \\ - \end{array} $	$256 \\ 19 \\ 15 \\ 131 \\ 9 \\ -$	$294 \\ 21 \\ 36 \\ 35 \\ 28 \\ -$	$128 \\ 3 \\ 34 \\ 24 \\ 15 \\ -$	$-2 \\ 4 \\ 32 \\ 2 \\ -$	- 1 1 3 -	-	1,221 121 97 232 88	$ \begin{array}{c c} 1,221 \\ 121 \\ 97 \\ 232 \\ 88 \\ 7 \end{array} $
$1941-42\\1942-43\\1943-44\\1944-45$		-	$1 \\ 29 \\ 2 \\ 31$	$9 \\ 75 \\ 9 \\ 12$	$11 \\ 17 \\ 10 \\ 9$	$2 \\ 2 \\ -14$	$3 \\ 1 \\ 1 \\ 26$	$\begin{array}{c} -1\\ 2\\ 36\end{array}$	1 1 1	$26 \\ 125 \\ 24 \\ 128$	59 125 28 128
$\begin{array}{c} 1935-36\ldots \\ 1936-37\ldots \\ 1937-38\ldots \\ 1938-39\ldots \\ 1938-39\ldots \\ 1939-40\ldots \\ whates, 1940-41\ldots \end{array}$	· -	$ \begin{array}{r} 12 \\ 70 \\ 28 \\ 51 \\ 7 \\ - \end{array} $	$31 \\ 136 \\ 118 \\ 232 \\ 87 \\ -$	170 254 381 318 296	$ \begin{array}{r} 140 \\ 301 \\ 600 \\ 292 \\ 299 \\ - \end{array} $	$167 \\ 253 \\ 264 \\ 189 \\ 154 \\ -$	$51\\90\\211\\86\\-$	-14 71 14 10 -		520 1,079 1,552 1,307 939	$520 \\ 1,079 \\ 1,552 \\ 1,307 \\ 939 \\ 747$
1941-421942-431943-441944-45		5 - - -	83 62 23 60	$164 \\ 163 \\ 146 \\ 420$	$208 \\ 275 \\ 176 \\ 305$	92 94 49 91	$123 \\ 141 \\ 45 \\ 81$	$42 \\ 32 \\ 101 \\ 30$	- 9 3 -	$717 \\ 776 \\ 543 \\ 987$	1,189 776 632 987
$Hump - \begin{cases} 1935 - 36 \dots \\ 1936 - 37 \dots \\ 1937 - 38 \dots \\ \end{cases}$		-	- 1 - -	$11 \\ 7 \\ 20 \\ -$		2 - 2 -	- 1 - -			41 17 40	-
$ \begin{array}{c} backs. \\ 1941-42\ldots \\ 1942-43\ldots \\ 1943-44\ldots \\ 1944-45\ldots \end{array} $			-	11 - - -	$\frac{1}{4}$	- - 3	- - 6	$^{-}_{-}_{45}$		$\begin{array}{c} 12\\ -\\ 4\\ 60\end{array}$	$ \begin{array}{c c} 16 \\ - \\ 4 \\ 60 \end{array} $
$\begin{array}{c} \left\{ \begin{array}{c} 1935{-}36\ldots \\ 1936{-}37\ldots \\ 1937{-}38\ldots \\ 1938{-}39\ldots \\ 1938{-}39{-}\ldots \\ 1939{-}40\ldots \\ whales. \end{array} \right\}$	·		-1 10 1 4 -	$\begin{array}{c} -\\9\\5\\4\\13\\-\end{array}$	$ \begin{array}{c} 1 \\ 6 \\ 5 \\ 5 \\ 4 \\ - \end{array} $	$2 \\ 9 \\ - \\ 5 \\ 29 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ $	- 34 18 87 34 -			$3 \\ 70 \\ 43 \\ 117 \\ 84 \\ -$	
$1941-42\\1942-43\\1943-44\\1944-45$. –	-	3 - - -	$1\\1\overline{6}\\4$	$\begin{array}{c}13\\-\\12\\12\\12\end{array}$	8 7 19 14	$30 \\ 16 \\ 21 \\ 12$	$16 \\ 1 \\ 17 \\ -$	- 4 3	71 24 89 45	109 24
$Sei-whales. \begin{cases} 1935-36\ldots \\ 1936-37\ldots \\ 1937-38\ldots \\ 1938-39\ldots \\ 1939-40\ldots \\ 1940-41\ldots \end{cases}$	·	- 1 - - -	-		- 33 - 10 -	51 33 - 20 -	$219 \\ 91 \\ 13 \\ 50 \\ -$	$167 \\ 31 \\ 6 \\ - \\ - \\ -$		$471 \\ 155 \\ 19 \\ 80 \\ -$	155 19 80 88
$1941-42\\1942-43\\1943-44\\1944-45$	·				$ \frac{4}{9} $	$16 \\ 4 \\ 109 \\ 28$	$23 \\ 4 \\ 43 \\ 31$	$3 \\ 58 \\ 1 \\ 15$	$\frac{-}{7}$	$46 \\ 73 \\ 162 \\ 76$	52 73 197

	1935-	-36.	1936-	-37.	1937-	-38.	1938-	-39.	1939-	-40.	1940-	-41.	1941-	-42.	1942-	-43.	1943-	-44.	1944-	-45.
	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 o f 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																				
males	1 1	53.97		71.19		73.53		44.90		84.09		-		81.82		64.91		90.91		73.58
females	364	56.79		64.52		80.95		48.51		79.55		-	13	86.67	53	77.94	8	61.54	54	72.00
animals	677	55.45	82	67.77	76	78.35	109	46.98	72	81.82		-	22	84.62	90	72.00	18	75.00	93	72.60
Mature																				
males	267	46.03	17	28.81	9	26.47	54	55.10	7	15.91	_	_	2	18.18	20	35.09	l 1	9.09	14	26.42
females		43.21		35.48		19.05		51.49		20.45		_		13.33	$\tilde{15}$	22.06		38.46		28.00
animals	544	44.55	39	32.23	21	$\overline{21.65}$		53.02		18.18				15.38	35	28.00	6	25.00	35	27.34
Fin- whales.																				
Immature																				
males		40.15		42.61		37.89		30.72		46.22				34.53		28.54		30.10		27.71
females		38.21	-	49.90		39.39		33.24		57.14				41.13	135			35.83		35.50
animals	204	39.23	497	46.06	599	38.60	419	32.06	482	51.44	-	-	271	37.80	256	32.99	178	32.78	313	31.71
Mature									ĺ											
males	164	59.85	326	57.39	513	62.11	424	69.28	263	53.78	-		237	65.47	303	71.46	202	69.90	347	72.29
females	152	61.79	256	50.10	440	60.61	464	66.76	192	42.86	-	-	209	58.87	217	61.65		64.17	327	64.50
animals	316	$\overline{60.77}$	582	$\overline{53.94}$	953	$\overline{61.40}$	888	67.94	455	48.56	-		446	$\overline{62.20}$	520	67.01	365	$\overline{67.22}$	674	68.29

Table q.-South Georgia. Catch of immature and mature whales 1935/36-1944/45.

This table shows that on an average the comparative figure of immature blue-whales has been high during the war, whereas this tendency has not been so pronounced in the case of fin-whales.

Operating Areas outside the Antarctic.

On page 4, table c, a summary is given of whaling in all areas, including those outside the Antarctic. As will be known, in the International Whaling Statistics these areas have been divided into the North Atlantic and Arctic, Africa, Pacific North, Japan, and others.

We shall now proceed to a survey of these areas:

North Atlantic and Arctic.

In this area operations during the war have only taken place from the West coast of Norway and from Newfoundland.

Figures for these whaling grounds are given below in table r.

	West	coast of Norw	/ay 1)		Newfoundland	
Years	Whales	Boats	Whales per boat	Whales	Boats	Whales per boat
934	308	6	51	-	-	_
1935	225	10	23	198	3	66
1936	331	12	28	192	3	64
1937	342	12	29	483	5	97
938	395	12	33	-		-
1939	350	9	39	144	2	72
1940	_	-	-	78	1	78
1941	61	-	-		~	-
$1942\ldots\ldots$	110		-			-
943	163		-	98	1	98
944	147			199	3	66
1945	192	-	_	216	4	54

Table r.—Whales killed off the West coast of Norway and off Newfoundland in the years 1934—1945.

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

It will be observed that no operations were carried on from the West Coast of Norway in the summer of 1940. In the following years the yield was considerably lower than during the years preceding the war. These operations partly took place from ordinary small ships and for this reason no information has been given about catchers.

No whaling was carried on from Newfoundland in 1941 and 1942. During the other years the yield varied greatly, but in 1944 and 1945 the same results were achieved as in 1935–36.

Africa.

As in the last years before the war, whaling off Africa has also during the war only been carried on from the coast of Natal. In the summer of 1939 some whales were also caught south of Madagascar. The statement of the yield in these years is contained in table s.

	Coast	of A Total			Natal		Car	oe Col	ony	c	ongo			outh adaga	
Years	Whales	Boats	Whales per boat	Whales	Boats	Whales per boat	Whales	Boats	Whales per boat	Whales	Boats	Whales per boat	Whales	Boats	Whales per boat
1934	2,392	21	114	1,574	17	93			_	818	4	205			
1934 1935	3,004	$\frac{21}{27}$	111	1,574 1,753	$17 \\ 17$	103	-	_	_	1,251	10^{-4}	1203 125			
1936	3,768	43	88	1,755 1,849	18^{17}	103	1.001	14	72	1,201 918	11	83	_	_	
1937	3,966	3 9	102	1,629	16	$103 \\ 102$	782	13	60	298	4	75	1,257	6	209
1938	3.044	$\frac{00}{22}$	138	1,029 1,239	$10 \\ 16$	77	102	- 10		200	-	10	1,805	-	301
1939	2,687	$\tilde{21}$	128	1,200 1.386	$16 \\ 16$	87	_		_			_		-	ca.260
1940	1,035	ĩĩ	94	1,035	ĩĩ	94	_		-	-	_	<u> </u>	-		
1941	759	5	152	759	$\overline{5}$	152	_	_	_	_	_	_		_	_
1942	498	5	100	498	$\tilde{5}$	100	_		_			_	_	-	
1943	724	$\tilde{5}$	145	724	5	145	_		_	_		-	_	_	
1944	819	5	164	819	5	164	_					_	_	_	<u> </u>
1945	447	5	89	447	$\tilde{5}$	89	_	_			-	_	-	-	_

Table s.-Whales killed off the coast of Africa 1934-1945.

It will be observed that during the war operations from Natal were greatly reduced and only involved 5 catchers, as compared to 16 just before the war. In consequence the number of whales killed is considerably less during this period, whereas the yield per catcher in most of the years has been considerably better than during the years preceding the war.

Pacific North.

In these waters whaling was carried on by a pelagic expedition (Japanese) in the two seasons 1940 and 1941, and from the coast of California during the five seasons 1940–1944. The yields are shown in table t next page.

In this region also the yield was very limited in the last three years of the war, whereas the catch was about normal in the first two years, 1940 and 1941, when the floating factory was operating.

Coast of Chile and Peru.

For several years whaling in this area has been carried on from shore stations. In the years before the war there were also some floating factories in the field, which mostly caught sperm-whales. No whaling took place from the shore stations between 1939 and 1944, but in 1944 and 1945 one shore station was in operation and mostly caught sperm-whales. In the years 1941–1943 a Norwegian

			Sp	oecies o	f wha	les caug	ght.			E	xpedition	s.
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
Pacific North. Total.	$\begin{array}{c} 1934\\ 1935\\ 1936\\ 1937\\ 1938\\ 1939\\ 1940\\ 1941\\ 1942\\ 1943\\ 1944\\ 1945\\ \end{array}$	$ \begin{array}{r} - \\ 140 \\ 44 \\ 54 \\ 37 \\ 5 \\ 34 \\ 40 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$	$\begin{array}{c} - \\ 117 \\ 208 \\ 228 \\ 115 \\ 93 \\ 298 \\ 374 \\ 10 \\ 19 \\ 1 \\ - \end{array}$	$ \begin{array}{r} - \\ 148 \\ 132 \\ 114 \\ 16 \\ 85 \\ 127 \\ 22 \\ 12 \\ 5 \\ 1 \\ - \\ \end{array} $	$\begin{array}{r} -6\\ -13\\ -\\ -\\ 3\\ 7\\ 1\\ 2\\ 2\\ -\end{array}$	$\begin{vmatrix} -& -\\ 253\\ 377\\ 321\\ 315\\ 49\\ 181\\ 157\\ 3\\ 3\\ 1\\ - \end{vmatrix}$	$ \begin{array}{c} 1 \\ $	855 857 730 483 232 702	$\begin{array}{c} 38,784\\ 36,896\\ 33,389\\ 22,891\\ 9,424\\ 31,101\\ 24,505\\ 948\\ 760\end{array}$	$ \begin{array}{c} 3 \\ 4 \\ 4 \\ 3 \\ 2 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} $		$15 \\ 16 \\ 15 \\ 14 \\ 11 \\ 5 \\ 5 \\ 9 \\ 1 \\ 3 \\ 2 \\ -$
Alaska.	$1934 \\ 1935 \\ 1936 \\ 1937 \\ 1938 \\ 1939 \\ 1940-45$		$94\\160\\170\\65\\91$	-141 118 104 12 26 $-$	- - 1 - -	$ \begin{array}{c} -70 \\ 66 \\ 56 \\ $	-	$\begin{array}{c} 394 \\ 385 \end{array}$		$\begin{array}{c} 2\\ 2\\ 2\\ 1\end{array}$		7 7 6 5 3
British Columbia.	$1934 \\ 1935 \\ 1936 \\ 1937 \\ 1938 \\ 1939 \\ 1940-\!45$	-631 14 -	-20 48 44 50 $-$	- 1 14 7 4 -		$ \begin{array}{c c} - \\ 175 \\ 311 \\ 265 \\ : 52 \\ - \\ - \\ - \\ \end{array} $	-	202 376 317	$18,300 \\ 10,334 \\ 16,969 \\ 14,719 \\ 13,157 \\ -$	$\begin{array}{c} 1 \\ 2 \\ 2 \end{array}$		6 4 6 6 - -
California.	$\begin{array}{c} 1934\\ 1935\\ 1935\\ 1936\\ 1937\\ 1938\\ 1939\\ 1940\\ 1941\\ 1942\\ 1943\\ 1944\\ 1945\\ \end{array}$		$ \begin{array}{c} - \\ - \\ 14 \\ - \\ 2 \\ 6 \\ 7 \\ 10 \\ 19 \\ 1 \\ - \\ \end{array} $	- - 3 59 19 16 12 5 1 -	$\frac{1}{2}$	-		189	$5,144 \\ 2,602 \\ 1,002 \\ - \\ 1,837 \\ 1,607 \\ 683 \\ 948 \\ 760 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ $			2 2 2 2 - 2 1 2 1 3 2 -
Coast of Mexico.	$1935 \\ 1936 - 45$	47 -	3 -	6 -	6 -	8	-	70	3,821	-	1 -	3 -
Pelagic whaling.	$1940 \\ 1941 \\ 1942-45$	$\begin{array}{c} 34\\40\\-\end{array}$	292 367 -	$ \begin{array}{r} 108 \\ 6 \\ - \end{array} $	3 7 -	$\left \begin{array}{c}177\\156\\-\end{array}\right $			29,494 23,822			4 7 -

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

floating factory operated in this field but only caught sperm-whales. Details of the yield will appear from table u.

			Species (of whale	s caught				E	xpeditio	ns.
Years	Blue.	e. Fin. Hump- back.		Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								Barrels.		1	
1934	18	117	12		185	¹) 35	367	13,626	3	-	?
1935	40	71	29	85	173	²) 71	469	16,633	3	1	5
1936	174	235	18	10	2,109	³) 1	2,547	70,642	2	2	19
1937	81	130	18	3	3,888	<i>′</i> –	4,120	101,756	4) 2	3	4) 25
1938	15	56	6	44	767	³) 14	902	21,148	5) -	⁵) 1	5) 8
1939	2	99	7	15	279	³) 5	407	5,797	1	1	4
1940	-	-	-	-	-	<i></i>		- 1		-	-
1941		-	-	-	1,914	-	1,914	41,359		1	8
1942	-		-	-	3,346		3,346	64,500	_	1	8
1943	_	-	-	-	3,299		3,299	72,000		1	8
1944	2	61	-	-	304		367	13,863	1		3
1945	42	80			365		487	20.784	1		3

Table u.-Coast of Chile and Peru.

¹) 15 right-whales and 20 others. ²) Different kinds of small whales and 36 right-whales. ⁸) Right whales. ⁴) The figures for the shore stations on the coast of Chile and the number of catchers attached thereto are not confirmed by the companies. ⁵) No information as to the material in operation off the coast of Chile.

Japan and Corea.

Japanese whaling in these waters continued in the seasons 1939-1941 and assumed normal proportions. No whaling has taken place since then, as will appear from table v.

Table v.—Japan a	nd Corea.
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			Species o	f whale		Expeditions.					
Years.	Blue.	Fin.	Hump- back.	Sei.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.		
						1	1	Barrels.			
1934	21	287	59	298	357	¹) 414	1,436	22,766		-	21
1935	21	273	70	380	479	¹) 564	1,787	29,178		-	21
1936	3	241	72	348	549	¹) 627	1,840	30,144	17		23
1937	12	300	68	435	640	²) 611	2,066	32,425	8	-	24
1938	4	293	60	553	785	³) 275	1,970	33,353	21	-	25
1939	10	241	86	677	1,266		2,280	12,784	4) -	-	23
1940	15	252	33	429	1,306		2,035	25,143	4)	-	45
1941	26	360	40	623	1,298	⁵) 2	2,349	28,084	4) -	-	49
1942 - 45	-		-		· -	- I	-		l –	-	-

¹) No specification. ²) Different kinds of small whales and 5 right-whales. ³) Different kinds of small whales and 2 right-whales. ⁴) No information of the number of shore stations in operation. ⁵) Right-whales.

Kamtchatka.

From Kamtchatka whaling was carried on by Russian floating factories in all seasons between 1940 and 1945, but reports have only been received in respect of the yield in 1941, as shown in table w next page.

			Species o	f wha	les caugh	nt.			Expeditions.				
Years	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.		
								Barrels.					
1934	2	150	51	1	74	¹) 61	339	12,168		1	3		
1935	1	206	143		-	²)137	487	19,398	-	1	3		
1936	5	210	68		113	³)105	501	18,238	_	1	3		
1937	-	142	65	1	198	4) 12	418	⁵)16,480		1	3		
1938	-	104	43		64	⁶) 54	265	9,102	_	1	3		
1939	-	238	43		154	7) 41	476	18,854	_	1	3		
1940	-		-		-	_		_	-	- 1	-		
1941	9	254	7	11	194	⁸) 68	543	18,235	÷	1	3		
1942-45	_	-	_		-	. –	- 1	-	_	-	-		

Table w.-Kamtchatka.

¹) 54 grey-whales, 6 bottlenoses and 1 Minke-whale. ²) No specification. ³) 102 grey-whales and 3 without specification. ⁴) 11 grey-whales and 1 right-whale. ⁵) The quantity of oil has been calculated as no information was to hand re. oil production. ⁶) Grey-whales. ⁷) 29 grey-whales and 12 without specification. ⁸) 2 Minke-whales, 57 grey-whales, 5 bottlenoses, and 4 dolphines.

New Zealand.

The operations which took place from New Zealand from 1930 onwards were continued during the whole war. As will be seen from table x, figures are missing for 1939, and no reports have been received concerning the number of catchers. The yield has generally been somewhat bigger than in the years before the war.

-			Species of	whales	caught.				Expeditions.			
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	
-								Barrels.				
1934	_		52	-	-		52	1,554	1	-	1) -	
1935	_	-	57			-	57	1,542	1	-	1) -	
1936	-	_	56	-	-		56	1,673	1	-	1) -	
$1937\ldots$	-	-	56	-	-	-	56	1,673	1	-	3	
1938	1	-	75	-	1	-	77	2,391	1		3	
1939^2)	-		-	-	_	_		-	-	-	-	
1940	1	-	75	-	1	-	77	2,390	1	-	-	
1941	1	-	80			-	81	2,689	1	-	-	
1942	_	-	107		2	-	109	3,909	1	-	-	
$1943\ldots$		-	86	-		-	86	3,084	1	-	-	
1944	-	-	71		-	-	71	2,988	1	-	-	
$1945\ldots$	-	-	88	-	-	-	88	2,630	1	-	-	

Table x.-Whaling off the coast of New Zealand in the years 1934-1945.

 $^{\rm 1})$ No information as to the number of catchers. $^{\rm 2})$ Whaling has been carried on during summer 1939, but no information has been available.

Portugal (Azores).

In these waters operations were also continued during the whole war. As table y indicates a few more whales were caught than in the years preceding the war.

			Species	of whale	es caught	•			F	Ixpeditio	ns.
Years	Blue.	Fin.	Hump- back	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers. ²)
								Barrels.]	1
1933	-	-	-	-	77	¹)176	253	-	-	-	-
1934	-	-	-	-	82	¹)158	240	-	-	-	
1935		-	-	-	136	³)140	276	-	-	·	-
1936		-	-		172	³)308	4)480	-	-	-	-
1937	_	- 1			80	³)208	⁵)288	-	-	-	-
1938	-	-	-		-	³)388	6)388	7,284	-	-	-
1939	-	-	-		-	³)389	389	6,920	-	-	-
1940	-	-	_	-	_	³)552	552	10,047	-	-	-
1941	-	-			_	³)501	501	9,057	-	-	
1942	-	-	-	-	_	³)606	606	13,070	-	-	-
1943	-	-	-		-	³)770	770	13,880	-	-	-
1944	-	38	-		20	³)418	476	10,073		-	-
1945	-	-	-		-	³)521	521	10,715	-	-	-

Table y.-Portugal (Azores).

¹) Different kinds of small whales. ²) Whaling is carried on with row-boats on old lines. ⁸) No specification. ⁴) The whales have been caught during the period $\frac{1}{9}$ 1935—³¹/12 1936. ⁵) The whales have been caught during the period $\frac{1}{1-30}$ in 1937. ⁶) Probably a small number of whales has also been caught from the island of São Miguel and perhaps also from some others of the islands of Azores, but no information is available.

In all other areas than those mentioned above all operations were discontinued during the war.

Yields according to countries.

The foregoing returns only contain figures for operations in the various areas, but not according to countries. The term country in this sense refers to the nation under whose flag operations take place irrespective of which country's capital is really involved in the operations.

In order to give an illustration of this, the table z on next page is presented.

The growing influence of Japanese whaling in the years before the war and the first years of the war should be observed. It should also be noted that the only countries that kept up whaling all through the war were the Argentine, The British Empire, Norway, Portugal, and Sovjet Russia. Figures for the Russian catch are, however, lacking for most of the war years. Otherwise the tables do not provide a reliable basis for estimating the development of whaling operations in each country in the abnormal situation created by the war.

Naturally, the figures for the war years are on the whole not well suited for more accurate analysis. They do not give an answer to the question of how catching has influenced the stock of whales. It is only when results of the catch in the first post-war years are available that the figures here presented may possibly provide a basis for an opinion on that subject and, by inference, on the future of whaling. In this publication we confine ourselves to state the facts.

All Argen-British Den-Ger-Pana-Portu-Sovjet Years. Chile. United Brazil. Iceland. Japan. Mexico. Norway. countries tine. Empire. mark. Spain. many. Russia. ma. gal. States. 1933–34..... 32,586 1.13914.6161233671,436 13,657 240339669 1934–35.... 39,311 17,533809 469117 282,0007016.9392764875831935–36.... 44,855 94419,906 23885 114 2.47915,6702,4494805011,989 1936–37.... 51,3791,014 21,387 168 1,089799204,025 -2)15,9432,389288418 3,659 1937-38..... 54,835 1,06219.5423005,8392081477,552 $-|^{2})15,355$ 1,5272653882.6501938–39....)45.6291.02414,0234071785,066130 9.820-2)11.871 907 389 4761,338 1939-40..... 37,379 70512,955----9,698 11,040 1,421 5521.008 1940-41..... 23,174868 3,95612,920 • 4,362501543241941-42..... 6,120 1.066*** 966 . 3.456606 ----261942–43..... 6,167 998 908 -3,462 770 29•••• 1943-44..... 3,883962 1,089367 -•--9844765 1944-45..... 4,842 1,296..... 751 4871,787 521..... ----

Table z.-Whaling results for the various countries 1933/34-1944/45. Number of whales killed.

Absolute figures.

Percentage figures.

Years.	All countries.	Argen- tine.	Brazil.	British Empire.	Chile.	Den- mark-	Ger- many.	Iceland.	Japan.	Mexico.	Norway.	Pana- ma.	Portu- gal.	Sovjet Russia.	Spain.	United States.
$\begin{array}{c} 1933-34 \\ 1934-35 \\ 1935-36 \\ 1936-37 \\ 1937-38 \\ 1938-39 \\ 1939-40 \\ 1940-41 \\ 1941-42 \\ 1941-42 \\ 1942-43 \\ 1943-44 \\ 1944-45 \\ \end{array}$	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	$\begin{array}{c} 2.0\\ 2.1\\ 2.0\\ 1.9\\ 2.2\\ 1.9\\ 3.7\\ 17.4\\ 16.2\\ 24.8 \end{array}$	-	$\begin{array}{c} 44.9\\ 44.6\\ 44.4\\ 41.6\\ 35.6\\ 30.7\\ 34.7\\ 17.1\\ 15.8\\ 14.7\\ 28.0\\ 15.5\end{array}$	$\begin{array}{c} 1.2 \\ 0.5 \\ 0.3 \\ 0.5 \\ 0.9 \\ - \\ - \\ 9.5 \end{array}$	0.3	1.8 10.7	$0.1 \\ 0.2 \\ 0.2$		-	$\begin{array}{c} 41.9\\ 43.1\\ 34.9\\ 31.0\\ 28.0\\ 29.5\\ 18.8\\ 56.5\\ 56.1\\ 25.3\\ 36.9\end{array}$	- - -	$\begin{array}{c} 0.7\\ 0.7\\ 1.1\\ 0.6\\ 0.7\\ 0.9\\ 1.5\\ 2.2\\ 9.9\\ 12.5\\ 12.3\\ 10.8\end{array}$	1.0 1.2 1.1 0.8 0.5 1.1 - - - - - - - - - -	_	$\begin{array}{c} 2.1 \\ 1.5 \\ 4.4 \\ 7.1 \\ 4.8 \\ 2.9 \\ 2.7 \\ 0.1 \\ 0.4 \\ 0.5 \\ 0.1 \\ - \end{array}$

1) The figure is not quite complete. See note 2 page 4. 2) Including the catch of two Norwegian expeditions hired by Germany—in 1936-37 1,756 whales, \exists 1937-38 2,158 whales, and in 1938-39 1,658 whales.

INTERNATIONAL AGREEMENTS FOR THE REGULATION OF WHALING

International Whaling Conference in London May 24th—June 8th 1937.

Protocol.

The Governments of the Union of South Africa, the United States of America, the Argentine Republic, the Commonwealth of Australia, Germany, the United Kingdom of Great Britain and Northern Ireland, the Irish Free State, New Zealand and Norway, desiring to secure the prosperity of the whaling industry and, for that purpose, to maintain the stock of whales, have agreed as follows: —

Article 1.

The contracting Governments will take appropriate measures to ensure the application of the provisions of the present Agreement and the punishment of infractions against the said provisions, and, in particular, will maintain at least one inspector of whaling on each factory ship under their jurisdiction. The inspectors shall be appointed and paid by the Governments.

Article 2.

The present Agreement applies to factory ships and whale catchers and to land stations as defined in Article 18 under the jurisdiction of the contracting Governments, and to all waters in which whaling is prosecuted by such factory ships and/or whale catchers.

Article 3.

Prosecutions for infractions against or contraventions of the present Agreement and the regulations made thereunder shall be instituted by the Government or a Department of the Government.

Article 4.

It is forbidden to take or kill grey-whales and/or right-whales.

Article 5.

It is forbidden to take or kill any blue-, fin-, humpback- or sperm-whales below the following lengths, viz: —

(a)	Blue-whales	70	feet
(b)	Fin-whales	55	»
(c)	Humpback-whales	35	»
(d)	Sperm-whales	35	»

Article 6.

It is forbidden to take or kill calves, or suckling whales or female whales which are accompanied by calves or suckling whales.

Article 7.

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 the 8th day of December to the 7th day of March following, both days inclusive, provided that in the whaling season 1937/38 the period shall extend to the 15th day of March 1938, inclusive.

Article 8.

It is forbidden to use a land station or a whale catcher attached thereto for the purpose of taking or treating whales in any area or in any waters for more than 6 months in any period of twelve months, such period of six months to be continuous.

Article 9.

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, viz:—

- (a) in the Atlantic Ocean north of 40° South Latitude and in the Davis Strait, Baffin Bay and Greenland Sea;
- (b) in the Pacific Ocean east of 150° West Longitude between 40° South Latitude and 35° North Latitude;
- (c) in the Pacific Ocean west of 150° West Longitude between 40° South Latitude and 20° North Latitude;
- (d) in the Indian Ocean north of 40° South Latitude.

Article 10.

Notwithstanding anything contained in this Agreement, any contracting Government may grant to any of its nationals a special permit authorising that national to kill, take and treat whales for purposes of scientific research subject to such restrictions as to number and subject to such other conditions at the contracting Government thinks fit, and the killing, taking and treating of whales in accordance with the terms in force under this Article shall be exempt from the operation of this Agreement.

Any contracting Government may at any time revoke a permit granted by it under this Article.

Article 11.

The fullest possible use shall be made of all whales taken. Except in the case of whales or parts of whales intended for human food of for feeding animals,

the oil shall be extracted by boiling or otherwise from all blubber, meat (except the meat of sperm whales) and bones other than the internal organs, whale bone and flippers, of all whales delivered to the factory ship or landstation.

Article 12.

There shall not at any time be taken for delivery to any factory ship or land station a greater number of whales than can be treated efficiently and in accordance with Article 11 of the present Agreement by the plant and personnel therein within a period of thirty-six hours from the time of the killing of each whale.

Article 13.

Gunners and crews of factory ships, land stations and whale catchers shall be engaged on terms such 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, and no bonus or other remuneration, calculated by reference 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 Agreement.

Article 14.

With a view to the enforcement of the preceding Article each contracting Government shall obtain, in respect of every whale catcher under its jurisdiction, an account showing the total emolument of each gunner and member of the crew and the manner in which the emolument of each of them is calculated.

Article 15.

Articles 5, 9, 13 and 14 of the present Agreement, in so far as they impose obligations not already in force, shall not until the 1st day of December 1937 apply to factory ships, land stations or catchers attached thereto which are at present operating or which have already taken practical measures with a view to whaling operations during the period before the said date. In respect of such factory ships, land stations and whale catchers the Agreement shall in any event come into force on the said date.

Article 16.

The contracting Governments shall obtain with regard to all factory ships and land stations under their jurisdiction records of the number of whales of each species treated at each factory ship or land station and as to the aggregate amounts of oil of each grade and quantities of meal, guano and other products derived from them, together with particulars with respect to each whale treated in the factory ship or land station as to the date and place of taking, the species and sex of the whales, its length and, if it contains a foetus, the length and sex, if ascertainable, of the foetus.

Article 17.

The contracting Governments shall, with regard to all whaling operations under their jurisdiction, communicate to the International Bureau for Whaling Statistics at Sandefjord in Norway the statistical information specified in Article 16 of the present Agreement together with any information which may be collected or obtained by them in regard to the calving grounds and migration routes of whales.

In communicating this information the Governments shall specify:--

- (a) the name and tonnage of each ship factory
- (b) the number and aggregate tonnage of the whale catchers;
- (c) a list of the land stations which were in operation during the period concerned.

Article 18.

In the present Agreement the following expressions have the meanings respectively assigned to them, that is to say:—

- "factory ship" means a ship in which or on which whales are treated whether wholly or in part;
- "whale catcher" means a ship used for the purpose of hunting, taking, towing, holding on to, or scouting for whales;
- "land station" means a factory on the land, or in the territorial waters adjacent thereto, in which or at which whales are treated whether wholly or in part; "baleen whale" means any whale other than a 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 finner, common rorqual, finback, fin-whale, herring-whale, razorback, or true fin-hale;
- "grey-whale" means any whale known by the name of grey-whale, California grey, devil fish, hard head, mussel digger, grey 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, spermacetwhale, cachalot or pot-whale;
- "length" in relation to any whale means the distance measured on the level in a straight line between the tip of the upper jaw and the notch between the flukes of the tail.

The present Agreement shall be ratified and the instruments of ratification shall be deposited with the Government of the United Kingdom of Great Britain and Northern Ireland as soon as possible. It shall come into force upon the deposit of instruments of ratification by a majority of the signatory Governments, which shall include the Governments of the United Kingdom, Germany and Norway; and for any other Government not included in such majority on the date of the deposit of its instrument of ratification.

The Government of the United Kingdom will inform the other Governments of the date on which the Agreement thus comes into force and the date of any ratification received subsequently.

Article 20.

The present Agreement shall come into force provisionally on the 1st day of July, 1937, to the extent to which the signatory Governments are respectively able to enforce it: provided that if any Government within two months of the signature of the Agreement informs the Government of the United Kingdom that it is unwilling to ratify it the provisional application of the Agreement in respect of that Government shall thereupon cease.

The Government of the United Kingdom will communicate the name of any Government which has signified that it is unwilling to ratify the Agreement to the other Governments, any of whom may within one month of such communication withdraw its ratification or accession or signify its unwillingness to ratify as the case may be, and the provisional application of the Agreement in respect of that Government shall thereupon cease. Any such withdrawal or communication shall be notified to the Government of the United Kingdom by whom it will be transmitted to the other Governments.

Article 21.

The present Agreement shall, subject to the preceding Article, remain in force until the 30th day of June 1938, and thereafter if, before that date, a majority of the contracting Governments, which shall include the Governments of the United Kingdom, Germany and Norway, shall have agreed to extend its duration. In the event of such extension it shall remain in force until the contracting Governments agree to modify it, provided that any contracting Governments may, at any time after the 30th day of June 1938, by giving notice on or before the 1st day of January in any year to the Government of the United Kingdom (who on receipt of such notice shall at once communicate it to the contracting Governments) withdraw from the Agreement, so that it shall cease to be in force in respect of that Government after the 30th day of June following, and that any other contracting Government may, by giving notice in the like manner within one month of the receipt of such communication, withdraw also from the Agreement, so that it shall cease to be in force respecting it after the same date. Article 22.

Any Government which has not signed the present Agreement may accede thereto at any time after it has come into force. Accession shall be effected by means of a notification in writing addressed to the Government of the United Kingdom and shall take effect immediately after the date of its receipt.

The Government of the United Kingdom will inform all the Governments which have signed or acceded to the present Agreement of all accessions received and the date of their receipt.

In faith whereof the Undersigned, being duly authorised, have signed the present Agreement.

Done in London the 8th day of June 1937, in a single copy, which shall remain deposited in the archives of the Government of the United Kingdom of Great Britain and Northern Ireland, by whom certified copies will be transmitted to all the other contracting Governments.

> For the Government of the Union of South Africa: (Sgd.) F. J. du Toit.

For the Government of the United States of America:

(Sgd.) Herschel V. Johnson.

(Sgd.) Remington Kellogg.

For the Government of the Argentine Republic:

(Sgd.) Manuel E. Malbrán.

(Sgd.) M. Fincati.

(Sgd.) T. L. Marini.

For the Government of the Commonwealth of Australia: (Sgd.) S. N. Bruce.

For the Government of Germany:

(Sgd.) Wohlthat.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

(Sgd.) Henry G. Maurice.

(Sgd.) Geo. Hogarth.

For the Government of the Irish Free State:

(Sgd.) Sean O'Faolain O'Dulchaontigh.

For the Government of New Zealand:

(Sgd.) G. McNamara.

For the Government of Norway:

(Sgd.) Birger Bergersen.

Final Act.

The Conference, having this day signed an Agreement for the Regulation of Whaling, to take immediate effect, desires to add, for the consideration of the Governments represented at the Conference, the following observations. 2. The Agreement is valid for one year and will, it is hoped continue in force for future years, unless the Governments, or any of them, decide to the contrary. It is likely in the opinion of the Conference, to go far towards maintaining the stock of whales, upon which the prosperity of the whaling industry depends.

3. Experience may prove, however, that further measures of conservation are necessary or desirable. The Conference desires, therefore, to suggest that certain further methods of conservation and of preventing wastage of whales should be examined by the Governments concerned without delay, and that the Governments should take the necessary measures by legislation to place themselves in a position to impose such further regulations of whaling as experience may dictate.

4. The Agreement prescribes regulations mainly of general application to whaling from factory ships and land stations alike. The most important of these regulations are those requiring the observance of close seasons, prohibiting the taking of whales of certain species already threatened with extinction, prohibiting the taking of female whales with calves or suckling whales and of whales of different species below size limits prescribed for each species, requiring full commercial use to be made of every part of every whale taken, and limiting the time within which, from the time of catching, whales must be treated in al factory ship or land station as the case may be. The purpose of these regulations is to limit the number of whales killed and to prevent the waste of whale material.

5. Certain provisions of the Agreement, however, affect only pelagic whaling, in particular those provisions which absolutely prohibit pelagic whaling fcr baleen whales in certain large areas of the sea. This differentiation between whaling prosecuted by means of factory ships and by means of land stations, needs explanation. It has been urged that whaling as hitherto prosecuted from some land stations, especially near the equatorial zone, has been wasteful and harmful because the physiological condition of the whales taken was such that their oil yield was low and because whales were taken at these stations when they were about to throw their calves. Against this it may be argued that the raising of the size limits for various species under the Agreement will greatly restrict the catch brought to the land stations, that the land stations, not enjoying the mobility of the factory ships are already handicapped in the pursuit of whales, and that whatever catch they take is a comparatively insignificant fraction of the total catch. The Conference recommends that the catch of the land stations should be carefully studied and that the Governments should consider, in the light of such study, what further regulations, if any, should be attached to whaling from land stations, either generally or in particular geographical areas. In the view of the Conference there is a certain risk that the restrictions imposed on pelagic whaling may lead to a development of whaling from land stations and the Governments should accordingly place themselves in a position to check or regulate such development should it occur.

6. The Conference further recommends that the Governments should put themselves in a position to limit, if it is thought fit, the number of whale catchers that may be employed in connection with any factory ship or land station with a view to further limitation of the destruction of whales.

7. The Governments are also recommended to take powers, if they do not already possess them, to prohibit whaling entirely in any area of the sea either permanently or for a limited period. It is felt that it may be desirable, in the light of experience gained, to close permanently areas which may be proved to be calving areas, or to close from year to year selected areas of the Antarctic Ocean or elsewhere for the purpose of giving to the whales a sanctuary in which they may escape molestation.

8. The Conference also recommends that the Governments should place themselves in a position to regulate the methods of killing whales. Under existing methods of whaling, whales may be fatally injured, but lost owing to defects in the guns or harpoons in use including the propelling and bursting charges. This involves waste of whales. It is suggested that it may prove desirable so to regulate the methods of taking whales as to ensure that, by the use of suitable explosive charges, or by the use of a harpoon electrically charged, the whale when hit may be speedily killed and wastage thus avoided. Moreover, a regulation of this character may be expected to abate something of the undoubted cruelty of present methods of whaling.

9. The Conference further recommends that the contracting Governments should take steps to prevent this Agreement and any regulations made thereunder from being defeated by the transfer of ships registered in their territories to the Flag of another Government not a party to this Agreement, and suggests that for this purpose it might be provided that the transfer of a factory ship or whale catcher from its national Flag to the Flag of any other country should be permitted only under license of the Government.

10. The Conference believes that the regulations upon which it has agreed will certainly contribute to the maintenance of the stock of whales and to the prosperity of the whaling industry. Not all the representatives of Governments present at the Conference have been able to sign the Agreement, some of them not being authorised by their Governments in that behalf. It is hoped that all Governments represented will eventually accede to the Agreement. The Conference desires to urge upon the contracting Governments that they should use their utmost endeavours to secure the adhesion of such Powers as are interested in the whaling industry but were not represented at the present Conference. The Conference recognises that the purpose of the present Agreement may be defeated by the development of unregulated whaling by other ccuntries, in which case it would be a matter for consideration whether the present Agreement should be continued in force, or whether the contracting Governments should not agree to modify their regulations to meet the situation thus created, or even to permit their nationals to pursue whaling without regulation, so that they may derive from its pursuit such benefit as may be had before the stock of whales has been reduced to a level at which whaling ceases to be remunerative. For the Conference is convinced that, unless whaling is now strictly regulated, that eventuality cannot be regarded as remote.

11. In conclusion, the Conference desires to urge that a further Conference should be held at a convenient time next year, at which the results of the forthcoming season may be studied and the question of the modification or extension of the present Agreement be considered.

Done in London the 8th day of June 1937, in a single copy which shall remain deposited in the archives of the Government of the United Kingdom of Great Britain and Northern Ireland by whom certified copies will be transmitted to the other Governments which have signed the Agreement for the Regulation of Whaling.

- For the Government of the Union of South Africa: (Sgd.) F. J. du Toit.
- For the Government of the United States of America:
 - (Sgd.) Herschel V. Johnson.
 - (Sgd.) Remington Kellogg.
- For the Government of the Argentine Republic:
 - (Sgd.) Manuel E. Malbrán.
 - (Sgd.) M. Fincati.
 - (Sgd.) T. L. Marini.
- For the Government of the Commonwealth of Australia: (Sgd.) S. N. Bruce.
- For the Government of Germany:

(Sgd.) Wohlthat.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

(Sgd.) Henry G. Maurice.

(Sgd.) Geo. Hogarth.

For the Government of the Irish Free State:

(Sgd.) Sean O'Faolain O'Dulchaontigh.

For the Government of New Zealand.

(Sgd.) G. McNamara.

For the Government of Norway: (Sgd.) Birger Bergersen.

International Whaling Conference in London June 14th—June 24th 1938.

Protocol.

The Governments of the Union of South Africa, the United States of America, the Argentine Republic, the Commonwealth of Australia, Canada, Eire, Germany, the United Kingdom of Great Britain and Northern Ireland, New Zealand and Norway, desiring to introduce certain amendments into the International Agreement for the Regulation of Whaling, signed in London on 8th June 1937 (hereinafter referred to as the Principal Agreement) in accordance with the provisions of Article 21 thereof, have agreed as follows:—

Article 1.

With reference to the provisions of Articles 5 & 7 of the Principal Agreement 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 during the period from 1st October 1938 to 30th September 1939.

Article 2.

Notwithstanding the provisions of Article 7 of the Principal Agreement it is forbidden to 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 westwards as far as 160° West Longitude for a period of two years from the 8th day of December 1938.

Article 3.

(1) No factory ship which has been used for the purpose of treating baleen whales south of 40° South Latitude shall be used for that purpose elsewhere within a period of twelve months from the end of the open season prescribed in Article 7 of the Principal Agreement.

(2) Only such factory ships as have operated during the year 1937 within the territorial waters of any signatory Government shall, after the signature of this Protocol, so operate, and any such ships so operating shall be treated as land stations and remain moored in territorial waters in one position during the season and shall operate for not more than six months in any period of twelve months, such period of six months to be continuous.

Article 4.

To Article 5 of the Principal Agreement there shall be added the following: ----

"Except that blue whales of not less than 65 feet, fin whales of not less than 50 feet and sperm whales of not less than 30 feet in length 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."

Article 5.

To Article 7 of the Principal Agreement there shall be added the following: —

"Notwithstanding the above prohibition of treatment during a close season the treatment of whales which have been taken during the open season may be completed after the end of the open season."

Article 6.

In Article 8 of the Principal Agreement the word "baleen" shall be inserted after the word "treating".

Article 7.

For the areas specified in (a) (b) (c) and (d) of Article 9 of the Principal Agreement there shall be substituted the following areas, viz —

- (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 whales by such ship or 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.

Article 8.

For Article 12 of the Principal Agreement there shall be substituted the following, viz-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 carcase shall remain in the sea for a longer period than 33 hours from the time of killing to the time when it is taken up on to the deck of the factory ship for treatment.

Article 9.

The present Protocol shall come into force provisionally on the 1st day of July 1938, to the extent to which the signatory Governments are respectively able to enforce it.

Article 10.

(I) The present Protocol shall be ratified and the instruments of ratification shall be deposited with the Government of the United Kingdom of Great Britain and Northern Ireland as soon as possible.

(II) It shall come into force definitively upon the deposit of the instruments of ratification by the Governments of the United Kingdom, Germany and Norway.

(III) For any other Government which is a party to the Principal Agreement the present Protocol shall come into force on the date of the deposit of its instrument of ratification or notification of accession.

(IV) The Government of the United Kingdom will inform the other Governments of the date on which the Protocol comes into force and the date of any ratification or accession received subsequently.

Article 11.

(I) The present Protocol shall be open to accession by any Government which has not signed it and which accedes to the Principal Agreement before the definitive entry into force of the Protocol.

(II) Accession shall be effected by means of a notification in writing addressed to the Government of the United Kingdom and shall take effect immediately after the date of its receipt.

(III) The Government of the United Kingdom will inform all the Governments which have signed or acceded to the present Protocol of all accessions received and the date of their receipt.

Article 12.

Any ratification of, or accession to the Principal Agreement which may be deposited or notified after the date of definitive coming into force of the present Protocol shall be deemed to relate to the Principal Agreement as amended by the present Protocol.

In witness whereof the undersigned duly authorised thereto have signed the present Protocol.

Done in London the 24th day of June 1938 in a single copy which shall be deposited in the archives of the Government of the United Kingdom of Great Britain and Northern Ireland by whom certified copies shall be communicated to all the signatory Governments.

> For the Government of the Union of South Africa: C. T. te Water. F. J. du Toit.

> For the Government of the United States of America: Herschel V. Johnson. Remington Kellogg. Wilfrid N. Derby.

> For the Government of the Argentine Republic: Manuel E. Malbrán. M. Fincati.

For the Government of the Commonwealth of Australia: Robert G. Menzies.

For the Government of Canada: Vincent Massey.

For the Government of Eire: Sean O'Faolain O'Dulchaontigh. J. D. Rush.

For the Government of Germany: Helmuth Wohlthat.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

Henry G. Maurice. Geo. Hogarth.

For the Government of New Zealand: W. J. Jordan.

For the Government of Norway: Birger Bergersen.

Final Act.

1. In accordance with the Recommendation contained in paragraph 11 of the Final Act signed in London on 8th June 1937, a further Conference met in London on 14th June 1938, and subsequent days to consider modifications or extensions of the existing Agreement hereinafter referred to as the Principal Agreement.

2. The following Governments sent Delegates to the Conference:---

Union of South Africa, United States of America, Argentine, Australia, Canada, Denmark, Eire, France, Germany, United Kingdom of Great Britain and Northern Ireland, Japan, New Zealand and Norway. An observer also attended on behalf of the Portuguese Government, and the interests of Newfoundland were watched by the United Kingdom Delegation.

3. The Principal Agreement has been ratified by the Governments of Eire, Germany, Norway, United Kingdom of Great Britain and Northern Ireland and United States of America, whilst Canada and Mexico have since acceded to it. With regard to the remaining signatory Governments, New Zealand has actually ratified the Principal Agreement.

The Argentine Republic is enforcing the Principal Agreement by Executive Decree, and formal ratification is only a matter of time. The Conference understands that ratification of the Principal Agreement by the Governments of the Commonwealth of Australia and of the Union of South Africa has been delayed only by constitutional difficulties. The Conference is confident that these Governments will take steps at the earliest possible moment to remove these difficulties and to ratify. The Government of Denmark has notified its intention of acceding to the Principal Agreement and the Protocol as soon as the necessary powers to enforce their provisions have been obtained by legislation. The Government of France is prepared to accede to the Principal Agreement subject to certain reservations affecting land stations, which are dealt with later in this Act. Towards the end of the proceedings of the Conference the Japanese Delegation informed the Conference that their Government was prepared to take the necessary legislative and other measures to enable them to accede to the Principal Agreement and the Protocol after an interval of a year subject to a reservation in respect of the first paragraph of Article 3 of the Protocol. The Japanese Government is also prepared to observe the principles of the present Agreement as nearly as possible in the meantime. There is no information at present available as to the attitude of Portugal and the Government of Newfoundland has reserved its decision.

4. The necessary majority required by Article 21 of the Principal Agreement for the extension of its duration after 30th June 1938, has been secured.

5. The Conference took note of the fact that, according to the statistics of the catch of the last Antarctic season, the opinion expressed in paragraph 2 of the Final Act of the Conference of 1937, that the Principal Agreement was likely to go far in maintaining the stock of whales, had not been justified by the event, inasmuch as the actual number of whales killed (approximately 44,000) and the number of barrels of oil produced (approximately 3,250,000) were, respectively, some 10,000 and 600,000 in excess of the corresponding figures for the previous season.

6. The Conference had also before it a Resolution of the Whaling Committee of the International Council for the Exploration of the Sea, which met in Copenhagen on 23rd May 1938, in the following terms: —

"The Committee, viewing with alarm the evident decline of the stock of Blue Whales, is of opinion that nothing less than a limitation of the total amount of whale oil which may be taken in any whaling season can be effective in preserving the stock of Blue Whales from being reduced to the level at which it can no longer be the object of economic exploitation."

This resolution was adopted by the Council at its concluding Meeting on 28th May 1938, with a request that it should be brought to the notice of the Members of the present Conference.

7. In the light of the facts set forth in paragraph 5 above, and the terms of the above Resolution of the Whaling Committee of the International Council for the Exploration of the Sea, the Conference considered the following measures of general application which might be expected to limit the destruction of whales: —

- (a) a further reduction of the open season;
- (b) a limitation of the number of catchers which might be used in connection with each expedition;

- (c) an overhead limitation of output during the Antarctic whaling season, by which is meant that a limit of output should be fixed, after which all whaling should cease, though the limit might be reached before the end of the open season;
- (d) the fixing of a maximum oil production which no expedition should exceed in any one Antarctic season;
- (e) special measures of protection for humpback whales;
- (f) the establishment of a sanctuary in waters south of 40° South Latitude;
- (g) the closure of additional areas against pelagic whaling.

8. With regard to method (a) in the foregoing paragraph, the Conference agreed, with the exception of the Japanese Delegation who reserved their position for the season 1938—39, that the open season provided for in Article 7 of the Principal Agreement, that is to say, from the 8th day of December to the 7th day of March following, should be maintained. It was felt that few, if any, expeditions would be able to engage profitably in whaling if the open season in the Antarctic were further curtailed; and that a further curtailment of the open season would increase the temptation to evade the provisions of Articles 11 and 12 of the Principal Agreement, which are designed to secure that the fullest possible use shall be made of all whales taken.

9. With regard to method (b) a proposal was put forward that the number of whale catchers attached to any expedition should be limited to seven, but the Conference was unable to reach agreement either upon this proposal or upon any limitation in the number of whale catchers.

10. Although method (c) was advocated by the Whaling Committee of the International Council for the Exploration of the Sea as the most effective restriction of undue exploitation of the whale stock, the Conference did not feel able at the present time to recommend its adoption.

11. The Conference could not agree on the application of method (d). In particular, objection was taken to this method on the ground that its incidence would be unfair in that it would limit the operation of the most efficient factory ships and have little, if any, effect upon the operations of the smaller and less efficient factory ships. The question whether different maxima might be fixed for expeditions according to their capacity was raised, but it was clear that agreement would not be reached on this basis.

12. Although the Conference was unable to agree to the immediate adoption of methods (b), (c) or (d) there was a strong feeling that these were matters calling for further expert examination by all the Governments concerned, with a view to their consideration at a subsequent Conference.

13. With regard to method (e) attention was drawn to a Report recently issued by the Discovery Committee concerning the condition of the stock of humpback whales and to other evidence pointing to a serious decline of that stock, and the Conference appointed a Committee to study this question. The Committee reported that there was ample biological evidence to show that the humpback stock was in very serious danger in all sectors of the southern hemisphere, and recommended that there should be no hunting of this species of whale for at least a year in any waters or at least in the southern hemisphere and North Atlantic and dependent waters. It proved impossible to obtain the general agreement of the Conference to this proposal chiefly because some land stations depend mainly upon humpbacks for their output of oil, and it was contented that the total prohibition, even for one year, of the hunting of humpbacks would have an effect on these land stations disproportionate to that which it would have on pelagic expeditions. The Conference, therefore, while admitting the desirability of a total prohibition, agreed that in the first instance the hunting of humpbacks by means of pelagic expeditions should be prohibited in the waters south of 40° South Latitude. A provision to this effect has consequently been embodied in the Protocol (Article 1). It is hoped that this measure of protection coupled with the immunity which all baleen whales would enjoy in the greater part of the waters north of 40° South Latitude should have useful results and the Conference strongly recommends the Governments represented thereat and other Governments concerned to study this question further with a view to give complete protection to humpback whales for a suitable period after 30th September 1939.

14. With regard to method (f) the Conference agreed that the sector of the waters south of 40° South Latitude which lies between 70° West Longitude and 160° West Longitude should be a sanctuary for whales for at least two years and provision has been made accordingly in the Protocol (Article 2). In this sector commercial whaling has not hitherto been prosecuted but the evidence acquired by the Discovery Committee shows that it is frequented by baleen whales, and the Conference agreed that it was highly desirable that the immunity which whales in this area had hitherto enjoyed should be maintained. Little information is avaiable as to the extent to which whales from this area travel into the adjoining areas or vice versa, but there is reason to think that such movement does, to some extent, take place and that therefore the protection provided in this area may have useful results.

15. With regard to method (g), certain doubts having arisen already as to the limits of the Greenland Sea referred to in Article 9 of the Principal Agreement and as to the extent to which the Arctic Ocean is included within the area protected by that Article, it was suggested that the whole of the waters north of 66° North Latitude should be brought under protection, and that to the Atlantic and Indian Oceans and to the closed areas of the Pacific Ocean should be added their respective dependent waters. The Japanese Delegation, however, asked for a concession permitting whaling in the Arctic Ocean north of the Pacific Ocean, between 66° North Latitude, and 72° North Latitude. In view of the satisfactory declaration as to the position of the Japanese Government referred to in paragraph 3, the Conference agreed to exclude these waters from the restriction. Provision to meet these points has accordingly been made in the Protocol (Article 7).

16. In the fifth paragraph of the Final Act of the Conference of last year attention was drawn to the risk that the restrictions imposed on pelagic whaling might lead to a development of whaling from land stations, and the Governments were accordingly advised to place themselves in a position to check or regulate such development should it occur. Since the Conference of last year, an unforeseen development has occurred owing to the assumption in certain quarters that, in spite of the provisions of Article 9 of the Principal Agreement, it was legitimate to use a factory ship as a temporary "land station" when it remained within the territorial waters of a State. In the opinion of the Conference as a whole (United States of America Delegation dissenting) the wording of Article 9 of the Principal Agreement prohibits the use of a factory ship for treating whales in the whole of the areas specified, without exception. Briefly, the majority view of the Conference is that a factory ship does not lose its character of being a ship until at least it loses its power of independent movement, and that a factory ship moored in territorial waters is not less a ship than any other ship which drops its anchor or is moored in a port. Although the Conference has no doubt of the correctness of this interpretation of Article 9, it has been thought desirable, in view of the events which have occurred, to embody in the protocol an Article (Article 3) which, while placing beyond doubt the fact that it is not permissible to use a factory ship as a "land station", nevertheless makes a concession in respect of existing enterprises.

17. The French Delegation declared that the French Government was ready to accede to the present Agreement subject to the following reservations. First, that the term "land station" employed in the Principal Agreement means a factory on land or a factory placed near the coast on a construction fixed or anchored at the same spot during the whole of the hunting season, and one which cannot be subsequently employed as a factory ship fishing in the deep sea. Secondly, should any regulations be introduced regulating the number of land stations as thus defined, France reserves right to establish or to maintain three of such stations in her possessions in the Southern hemisphere. In view of the provisions of Article 3 of the Protocol coupled with the statement in paragraph 16 of this Final Act, the first reservation of the French Government appears to be satisfied. Furthermore, there is no provision in the Protocol regulating the number of land stations. The way therefore is clear for the accession of the Government of the French Republic.

18. It was represented to the Conference by the Danish Delegation that in the Faroe Islands whale hunting was prosecuted mainly to provide food in the form of whale meat for the population of the Islands, and that hitherto whaling had been conducted from two land stations in the Faroe Islands without regard to size limits. They intimated that it would be necessary for them, in order to accede to the Principal Agreement, which Denmark was otherwise ready to accept, to make a reservation in respect of size limits so far as they affected these stations. To meet this particular case and other cases of a similar character the Conference agreed to attach a proviso to Article 5 of the Principal Agreement. The Protocol (Article 4) provides that the size limit for blue, fin and sperm whales applicable to whales taken by catchers working from land stations may be reduced by five feet in each instance provided that the meat of such whales is to be used for local consumption. It is understood that this provision is to be limited in its application to stations which are genuinely intended to supply the local needs of the country in which the station is situated.

19. It was agreed that Article 7 of the Principal Agreement should be amended so as to allow of the treatment of whales after the end of the open season provided that they were killed before midnight on March 7th. Provision has been made accordingly in the Protocol (Article 5).

20. The Conference considered a statement by the Japanese Delegation with regard to the effect of Article 8 of the Principal Agreement upon land stations in Japan, some of which actually operate for more than six months in any one year, a considerable portion of the catch consisting of sperm whales. In order to meet so far as possible the case of such land stations the Conference agreed to confine the application of Article 8 to baleen whales and an amendment to this effect has been included in the Protocol (Article 6).

21. The Conference having considered reports to the effect that some difficulty has been experienced in the application of Article 12 of the Principal Agreement, the purpose of which is to limit the period between the killing and the treatment of a whale, it was agreed to remove the uncertainty as to the exact interpretation of the Article by re-drafting it on different lines with the same purpose in view. Provision has been made accordingly in the Protocol (Article 8).

22. The Conference learned with concern that during the Antarctic whaling season of 1936/37, and the summer of 1937, no less than 15 right whales had been killed. They were informed that some of these whales had been measured and among them four foetuses were found, the lengths of which were approximately twenty feet, nineteen feet, seventeen feet and one foot respectively. Some of these whales were taken by Nationals of Governments which were signatories to the Principal Agreement. The Conference desires to draw the attention of the Governments concerned to these breaches of the Geneva Convention and the Principal Agreement. From the commercial point of view, little advantage can accrue to any expedition by the taking of the few right whales that still exist, and in the opinion of the Conference, it is deplorable not only that right whales should be killed in spite of the provisions of the Principal Agreement, but that in particular as the statistics prove, breeding right whales should have been killed. The Conference, therefore, expresses the hope that, with a view to the preservation of the remainder of these most interesting mammals the Governments concerned should sternly enforce the provisions of Article 4 of the Principal Agreement.

23. The Conference took note of a statement by Dr. Mackintosh of the

proposals of the Discovery Committee for enlisting the support of whaling enterprises in the continuation and development of whale marking as carried out by the Committee. The Conference also heard a statement from the German Delegation as to the steps which the German Government proposes to take for the marking of whales. The Conference expressed the hope that the Governments and the whaling enterprises concerned will do their best to encourage the development of whale marking, which, in the view of the Conference, is likely to make an important contribution to the knowledge of the movement of whales which has a very close bearing upon the problem of conservation of whales.

24. With reference to paragraph 9 of the Final Act of the Conference of 1937, it was reported that the Governments of Germany and Norway had acquired the necessary powers to deal with transfers of ships registered in their territories and that the Government of the United States of America already possessed those powers. The Conference expressed the hope that other countries would take steps to acquire similar powers at an early date.

25. In conclusion, the Conference suggested that the question of holding a future Conference should be left to the consideration of the Governments concerned, in the light of developments.

Done in London the twenty-fourth day of June 1938 in a single copy which shall be deposited in the archives of the Government of the United Kingdom of Great Britain and Northern Ireland by whom certified copies shall be communicated to all the signatory Governments.

> For the Government of the Union of South Africa: C. T. te Water. F. J. du Toit.

For the Government of the United States of America: Herschel V. Johnson. Remington Kellogg. Wilfrid N. Derby.

For the Government of the Argentine Republic: Manuel E. Malbrán. M. Fincati.

For the Government of the Commonwealth of Australia: Robert G. Menzies.

For the Government of Canada: Vincent Massey.

For the Government of Denmark: P. E. Erichsen.

For the Government of Eire:Sean O'Faolain O'Dulchaontigh.J. D. Rush.

For the Government of Germany: Helmuth Wohlthat.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

Henry G. Maurice.

Geo. Hogarth.

For the Government of Japan: A. Kodaki.

For the Government of New Zealand: W. J. Jordan.

For the Government of Norway: Birger Bergersen.

Informal Conference in London July 17th-July 20th 1939.

Part I.

Report. (As signed).

(1) As the results of the views expressed at an informal meeting earlier in the year at which representatives of the United States of America, Germany, Japan, Norway and the United Kingdom were present, arrangements were made for an informal conference to be held in London for the purpose more particularly of examining the results of the whaling operations carried out during the season 1938/39.

(2) The Conference opened in London on Monday, 17th July 1939, and was continued until Thursday, 20th July 1939. Delegations from the United States of America, Germany, Japan, Norway and the United Kingdom were present, while Canada, Eire, New Zealand and South Africa each sent a representative. A full list of the delegates and representatives will be found in the Appendix to this report. At the request of the conference Mr. A. T. A. Dobson presided.

(3) The Conference first considered the present position as regards the ratifications and accessions to the Whaling Agreement, 1937, and the Protocol of 1938, and in this connection it was reported that Denmark had acceded to the Agreement and Protocol as from 10th July 1939. It was also reported by the Japanese Delegation that the Japanese Government, impressed with the necessity of reasonable restrictions for the preservation of the whale stocks, had definitely decided to complete all the necessary legislation to enable them to accede to the Agreement and the Protocol by the opening of the whaling season 1939/40, subject to the reservation referred to in the Final Act of 1938. The various delegates were all ready to recommend the acceptance of this reservation, but it was finally decided to frame a resolution, as set out in Part II of this Report (No. I). The British Delegation undertook to approach through the appropriate channels all those Governments who had not yet ratified the 1937 Agreement or the 1938 Protocol or either of them.

(4) The Conference considered a number of statements supported by graphs and tables which Professor Bergersen and his colleagues had been good enough to prepare with regard to the results of the whaling season 1938/39 in relation to previous years. From these results it was evident that there was a fall in the total catch of whales, the only increase being shown in the case of sperm whales. There was also a fall in the catch per day and in the average length of both blue and fin whales. Oil supplies also showed a decline and this in spite of the fact that the number and tonnage of factory ships and catchers showed an increase. It is true that the length of the season had been decreased by 8 days, but this can only to a small extent account for the above results. The conference was forced to the conclusion that the results were disquieting and revealed further depredations on the whale stocks which rendered it essential that the position should be watched from year to year.

(5) The Conference considered various memoranda furnished by the German and British delegations on the question of the whaling legislation and the regulations made thereunder by the various countries interested, more especially from the point of view of the penalties imposed for infractions of the law. It seemed to the Conference that there was considerable lack of uniformity in the legislation of those countries which had passed such legislation, while in the case of a number of countries no recent legislation on the subject of whaling had been passed at all. There were, too, considerable differences in the amount of the penalties imposed under the legislation in force. In view of this state of affairs the British delegation undertook, at the request of the Conference, to act as a clearing house and to endeavour to obtain, through the Foreign Office, both now and in future, sufficient copies of the whaling laws and regulations of other countries to enable them to be distributed. It was decided to include in this service information as to the prosecutions undertaken by the various countries for infringements of their whaling laws.

(6) The Conference also considered, through a sub-committee, a memorandum submitted by the German delegation on certain aspects of whaling legislation, which revealed difficulties of enforcement. On this subject the conference decided to make a recommendation which will be found in Part II of this Report (No. III).

(7) The Conference had the advantage of a verbal report on whale marking by Dr. Mackintosh illustrated by charts and supported by notes supplied by the German delegation on the results of the whale marking experiments carried out from the catchers in the German expeditions. The conference was impressed with the necessity of these marking operations, if they were to be fully effective, being carried out as extensively as possible by all expeditions. The Norwegian delegation indicated their intention of carrying out marking operations next season. As the result of the consideration of this whole problem by a sub-committee, which presented to the Conference a practical scheme in outline for whale marking capable of ready adoption by the whaling expeditions of any Government, the conference decided upon certain recommendations which are set out in Part II of this Report (No. IV). It was recognised, however, that it might be impossible to secure the carrying out of any additional marking schemes during the coming season, owing to the time required for the manufacture of equipment and to other factors. (8) The Conference was reminded that the embargo on the taking of humpback whales provided for in Article I of the Protocol of 1938 would expire on 30th September 1939, and after hearing a report on the humpback whale position generally by Professor Bergersen, decided to make the recommendation shown under this heading in Part II of this Report (No. II).

(9) While the Conference was occupied with its deliberations the whaling Inspectors who had accompanied the various delegations, conferred upon the possibility of securing a greater uniformity in the enforcement of the various regulations applicable and upon the desirability of making further regulations not only in the interests of uniformity, but also in the general interests of whale preservation. After examining the proposals of the Inspectors, the conference decided to make the recommendations set out in Part II of this Report. (No. V).

(10) The Conference cannot conclude this Report without expressing the conviction that the prospects as regards pelagic whaling are far from encouraging, and that it can only be by closer international co-operation, that the present whale stocks in the Antarctic can be reasonably maintained.

Part II.

Resolutions.

I. Article 3 (1) of the Protocol of 1938.

The Conference resolved to recommend:

That Article 3 (1) of the Protocol of 1938 should not apply to the following areas:

- (a) the sea area between 40° North Latitude and $52^{\circ} 30'$ North Latitude from 159° East Longitude eastwards to 140° West Longitude;
- (b) the sea area between $52^{\circ} 30'$ North Latitude and 72° North Latitude from 150° East Longitude eastwards to 140° West Longitude;
- (c) The OKHOTSK Sea northward of 52° 30' North Latitude.

II. Article 1 of the Protocol of 1938.

The Conference resolved to recommend:

That the provisions of Article 1 of the Protocol of 1938 should be extended for a further year from 1st October 1939, to 30th September 1940.

III. Legal.

In the light of the Report presented by the sub-committee appointed to examine the various difficulties that have arisen in the interpretation and enforcement of the whaling legislation and regulations in various countries, the conference resolved to recommend:

That the question of offences against whaling legislation and regulations and the appropriate penalties to be exacted should be referred to a special committee, representative of all the principal whaling countries, which should meet in advance of any future Conference and draw up a report for that Conference.

IV. Whale marking.

The Conference resolved to recommend:

That all Governments concerned should as far as possible arrange for the marking of the whales from their whale catchers, the marking programme being arranged in co-operation with the "Discovery" Committee and in accordance with the outline scheme referred to in Paragraph 7 of the Report.

V. Regulations. Uniformity. Enforcement.

The Conference resolved to recommend:

1. That all signatory Governments should draw the attention of their inspectors and of the whaling companies operating under their flags to the following facts:

That in the past many cases have occurred of infringement of Article 7 of the International Whaling Agreement 1937 on the pretext of providing fenders for the bunkering of whale boats.

That in future any person responsible for taking baleen whales out of season for use as fenders in connection with bunkering whale catchers will be prosecuted for an infringement of the law.

That if it is desired to send whale catchers long distances in the open sea before the commencement of the whaling season suitable arrangement must be made for bunkering them without the use of whale carcasses, such as by the supply of efficient artificial fenders or of hoses for use whilst in tow of the factory ship, and that the reasonable seamanlike precaution must be taken in good time of using this bunkering apparatus before the catchers become very short fuel in view of the ever present possibility of a sudden gale.

2. That the following new Regulations should be made.

(A) Whale Measurement.

Whales to be measured as accurately as possible with 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 to 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 measurement purposes, to be the point of the upper jaw and the notch between the tail flukes. A measuring apparatus of this type to be provided by the owners of each factory ship. Measurements, after being accurately read on the tape measure, to be logged to the nearest foot; that is to say, any whale between 75' 6" and 76' 6" to be logged as 76', and any whale between 76' 6" and 77' 6" to be logged as 77'. The measurement of any whale which apparently falls on an exact half foot to be logged at the next half foot e. g. 76' 6" precisely, to be logged as 77'. (B) Time of Death of Whales.

All vessels engaged in taking whales, to report by radio to the factory ship at the time when each whale is caught.

The factory ship to keep a record of these messages which record is to be easily accessible to the whaling inspector at all hours for his assistance in observing compliance with or infringement of Article 8 of the Protocol of 1938.

In order to facilitate the observance of the last mentioned Article a uniform system of marking whales on the tail with a knife to be observed by all vessels engaged in taking whales as follows:

A Roman numeral to be used to indicate the number of the catcher vessel which has taken the whale. Under this numeral one or more horizontal strokes to be made to indicate the number of each whale taken by that vessel on that day: e. g. Number two catcher shall mark her first whale each day thus: II. She shall mark her second whale in the day thus II and her fifth whale in the day thus II. Number six catcher shall mark her third whale in the day thus VI. The

day to commence and end at midnight.

Notches on the sides of the tail flukes to be made if desired to indicate the number of harpoons in each whale.

Every ship used for treating whales to keep a tally board on the flensing deck on which shall be marked the following particulars of each whale as it is hauled up on board the ship:

Time of hauling up on board,

Number of whale catcher which took the whale and the number of that

whale as marked on its tail in accordance with the above instructions, Species,

Length,

Sex,

Size and sex of foetus if any,

If milk-filled or lactating.

The official catch log book or record to be written up every 12 hours from the information on this board and certified by the inspector.

In writing up the catch log book or record, the date of each day to be taken as extending from midnight to midnight and the international 24-hour system of time used.

(C) Milk-Filled or Lactating Whales.

The regulation prohibiting the payment of bonus or other remuneration to gunners and crews of whale catchers for whale illegally taken to be extended to prohibit payment for any milk-filled or lactating whales.

3. All Governments to appoint two inspectors on every factory ship, and that the second inspector should, if possible, be a Biologist.

4. Individual Inspectors not to be continuously appointed to the same factory ship, but to be interchanged.

5. Governments to encourage as far as possible, the carrying out of experimental trial with new inventions and improved equipment as, for example, the electric harpoon gun.

VI. Conference 1940.

The Conference resolved to recommend:

That the consideration of the proposal to hold a Conference in 1940 should be deferred for the present.

VII. General.

With regard to the procedure to be adopted to give effect to the foregoing resolutions, the Conference resolved to recommend as follows:

- (a) That all resolutions shall be notified as soon as possible to the various Governments by the Government of the United Kingdom and that these Governments shall be urged to bring them into effect.
- (b) That Resolution I shall take effect as soon as notifications of acceptance have been received by the Government of the United Kingdom from the Governments of the United States of America, Denmark, Germany, Norway and the United Kingdom, and the receipt of these notifications has been communicated to the five Governments mentioned. And furthermore that this Resolution shall be embodied in a formal Protocol to be signed by duly authorised Representatives of the Governments concerned and shall be deemed to be one with the Whaling Agreement of 1937 and the Protocol of 1938.
- (c) That Resolution II shall take effect as soon as notifications of acceptance have been received by the Government of the United Kingdom from the Governments of Germany, Norway and the United Kingdom and the receipt of these notifications has been communicated to all the Governments concerned, provided that if the Governments of the United States of America and Japan or either of them fails to accept or notifies inability to accept this resolution, the Governments which have notified their acceptance shall be at liberty if they so desire to regard this resolution as null and void.

Done in London this 20th day of July 1939.

Representing the Government of the United States of America. (Signed.) Herschel V. Johnson.
Representing the Government of Germany: (Signed.) Helmuth Wohlthat.
Representing the Government of Japan: (Signed.) A. Kodaki.
Representing the Government of Norway: (Signed.) Birger Bergersen.
Representing the Government of the United Kingdom of Great Britain and Northern Ireland:

(Signed.) A. T. A. Dobson.

Final Act.

An International Whaling Conference was opened in London on the 4th January, 1944, and continued on the 13th, 19th and 31st January, 1944. The Governments of the countries mentioned below were represented as follows: —

Union of South Africa:	United Kingdom:
Mr. A. P. van der Post.	Mr. A. T. A. Dobson.
Australia: Mr. V. C. Duffy. Canada: Mr. E. MacLeod. New Zealand: Mr. W. E. Pratt.	 Mr. John Thomson. Dr. N. A. Mackintosh. Mr. J. R. S. MacLeod. Mr. J. S. Munro. Mr. R. H. Burt. Mr. D. James Davies (for Newfoundland)
Norway:	United States of America:
Professor Birger Bergersen.	Dr. Remington Kellogg.
Mons. Ing. Smith-Kielland.	Mr. Loyd V. Steere.
Mons. O. Berg.	Mr. John M. Allison.
Mons. E. A. Colban.	Captain A. C. Richmond.

Mr. A. T. A. Dobson (United Kingdom) was invited to preside over the Conference and Mr. A. M. Lowe (United Kingdom) acted as Secretary.

The object of the Conference was to consider whether it is desirable that any special measures should be put in force by agreement to operate when pelagic whaling is resumed in the southern hemisphere, such whaling having, owing to hostilities, not taken place for two or three years. All the Governments represented at the Conference were parties or signatories to the International Agreement for the Regulation of Whaling signed at London on the 8th June 1937, and the Protocol signed at London on the 24th of June, 1938.

The Conference, having heard a Statement on behalf of the Minister of Food of the Government of the United Kingdom on the present position and future prospects of world stocks of oils and fats recognised that the position of world supplies of oils and fats was a critical one and agreed that all possible measures should be taken, so far as whaling is concerned to alleviate the situation during the present emergency and the immediate post-war period. On the other hand, the Conference also recognised that it was a matter of vital importance to further the conservation of existing whale stocks, which prior to the war were showing signs of depletion, and that any relaxation of the Agreement of 1937 and the Protocol of 1938, designed to meet the present critical position of oils and fats, should be for a limited period only and should provide adequate safeguards to ensure that existing stocks of whales shall not be decimated by unexpected developments in whaling operations.

The Conference adopted at its last meeting the following four resolutions: ---

(i) That it is desirable that a Protocol, in the terms of the annex (3) to this resolution, should be signed and brought into force as soon as possible; that the Government of the United Kingdom is requested to make early arrangements for the signature of this Protocol by duly accredited representatives; that, as this Protocol makes certain temporary amendments to the Agreement of 1937, all Governments who are parties to that instrument (other than Governments with whom diplomatic relations are suspended by reason of hostilities) should be invited either to sign the present Protocol or to accede thereto; that Governments who are signatories to the Agreement of 1937, but have not become parties thereto by ratification should also be invited to sign the annexed Protocol or to accede thereto; and the copies of this Final Act should be communicated to all such Governments who are not represented at the present Conference.

(ii) That it is recommended that all the Governments represented at the Conference should, pending the coming into force of the Protocol, take all such administrative steps as are possible and necessary to put the provisions of the Protocol into operation forthwith, and the Government of the United Kingdom is requested to make the necessary approaches to them for this purpose.

(iii) That the maintenance of a limitation on the number of whales to be caught in any pelagic season in the waters south of 40 degrees south latitude is necessary if whale stocks are to be preserved and it is accordingly recommended that a limitation, such as that contained in Article 3 of the Protocol annexed to resolution No. (i), should be continued by international agreement after "the first season" referred to in the said Protocol; and that the continuance of such a limitation should be considered at the next and subsequent whaling Conferences.

(iv) The copies of this Final Act should be communicated as a matter of courtesy to the representatives in London of the Danish Government which is a party to the agreement of 1937 by accession.

(3) see page 30.

Done at London this 31st day of January, 1944, in a single copy which shall remain deposited in the archives of the Government of the United Kingdom which is requested to transmit certified copies to all Governments represented at the Conference.

For the Government of the Union of South Africa: A. P. van der Post.

For the Government of the United States of America: Remington Kellogg. Loyd V. Steere. For the Government of the Commonwealth of Australia: V. C. Duffy.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

A. T. A. Dobson.	J. S. Munro.
John Thomson.	<i>R. H. Burt.</i>
N. A. Mackintosh.	D. James Davies.

For the Government of Canada:

E. MacLeod.

For the Government of New Zealand: W. E. Pratt.

For the Government of Norway:O. Berg.Birger Bergersen.O. Berg.Ingv. Smith-Kielland.C. A. Colban.

Protocol of the International Regulation of Whaling.

London, 7th February 1944.

The Governments of the Union of South Africa, the United States of America, The Commonwealth of Australia, the United Kingdom of Great Britain and Northern Ireland, Canada, Eire, New Zealand and Norway.

Being parties or signatories to the International Agreement for the Regulation of Whaling signed at London on the 8th June, 1937 (1) (hereinafter referred to as the Agreement of 1937), and the Protocol signed at London on the 24th June, 1938, (2) introducing certain amendments into the Agreement of 1937 (hereinafter referred to as the Protocol of 1938); and

Desiring, in view of the fact that pelagic whaling operations in the area to which Article 7 of the 1937 Agreement have been interrupted for a considerable period by the existence of hostilities and in order to meet the present emergency without prejudicing the conservation of stocks of whales to put into force by agreement such provisions as may be necessary with regard to pelagic whaling in this area when whaling operations are resumed there:

Have agreed as follows: —

Article 1.

(i) The period fixed by Article 7 of the Agreement of 1937, during which factory ships or a whale catcher attached thereto may be used for the purpose of taking or treating baleen whales, shall be extended for the first season in which whaling operations are resumed in the area referred to in the said Article 7, so as to cover the period from the 24th November to the 24th March, both dates inclusive.

(ii) Each Government party to present protocol shall give notice to the Government of the United Kingdom when whale factory ships registered under the law of any territory under its authority or otherwise under its jurisdiction engage in whaling operations in the area defined in Article 7 of the Agreement of 1937. The Government of the United Kingdom will inform the other Governments party to the present protocol of all notices received under this paragraph and shall itself similarly give notice to the other contracting Governments if whale ships registered under the law of any territory under its authority or otherwise under its jurisdiction engage in whaling operations in the said area.

(iii) For the purpose of paragraph (i) of this article the first season in respect of which any notice has been given under paragraph (ii) above, shall be deemed to be the first season in which whaling operations are resumed. This season is hereinafter referred to as ",the first season".

(1) "Tretay Series No. 37 (1938)" Cmd. 5757. (2) "Treaty Series No. 18 (1939)" Cmd. 5993.

Article 2.

The provisions of Article 1 of the Protocol of 1938 relating to the taking of humpback whales in any waters south of 40 degrees south latitude shall apply during the first season.

Article 3.

(i) During the first season, the number of baleen whales caught in the area referred to in Article 7 of the 1937 Agreement shall not exceed 16 000 blue whale units.

(ii) For the purpose of paragraph (i) of this article, blue whale units shall be calculated on the basis that one blue whale equals ---

- (a) 2 fin whales, or
- (b) $2\frac{1}{2}$ humpback whales, or
- (c) 6 sei whales.

(iii) The Government of the United Kingdom shall consult all the Governments who have given notice under Article 1 (ii) of this agreement in order to arrange by co-operation and agreement the measures necessary to ensure that the total number of baleen whales caught during the first season does not exceed the number specified in paragraph (i) of this article.

Article 4.

In the absence of agreement to the contrary none of the provisions of the present protocol shall operate except in the first season.

Article 5.

The present protocol shall be ratified and the instruments of ratification deposited as soon as possible with the Government of the United Kingdom.

Article 6.

(i) The present protocol shall be open to accession on behalf of any Government which was a party to the 1937 Agreement and has not signed the present protocol.

(ii) Accession shall be effected by means of a notification addressed to the Government of the United Kingdom.

Article 7.

(i) The Government of the United Kingdom shall inform the Governments of the United States of America, Canada, Eire, Mexico, New Zealand and Norway of all ratifications of this protocol or accessions thereto.

(ii) The present protocol shall come into force as soon as ratifications or accessions have been deposited on behalf of all Governments referred to in paragraph (i) of this article and of the Government of the United Kingdom. (iii) The ratification of or accession to the present protocol by a Government which is a signatory but not a party to the Agreement of 1937 shall not become effective until such Government becomes a party to that agreement by ratification.

In witness whereof the undersigned plenipotentiaries, being duly authorised to this effect by their respective Governments, have signed the present protocol and affixed thereto their seals.

Done at London this 7th of February, 1944, in a single copy which shall remain deposited in the archives of the Government of the United Kingdom by whom certified copies will be transmitted to all the Governments referred to in Article 7 (i).

> For the Government of the Union of South Africa: Deneys Reitz. A. P. van der Post.

For the Government of the United States of America: Loyd V. Steere.

For the Government of the Commonwealth of Australia: S. M. Bruce.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

A. T. A. Dobson. J. E. de Watteville.

For the Government of Canada: Vincent Massey.

For the Government of New Zealand: W. J. Jordan.

For the Government of Norway: Birger Bergersen.

International Whaling Conference, London November 1945.

Final Act.

An International Whaling Conference was opened in London on the 20th November, 1945, and continued on the 21st, 22nd, and 23rd November 1945. The Governments of the Countries mentioned below were represented as

follows :---

Union of South Africa: Norway: Mr. A. P. van der Post. Professor B. Bergersen. Mons. V. Voss. Australia: Mons. H. Th. Knudtzon. Mr. C. G. Setter. Mons. J. Melander. Mr. V. C. Duffy. Mons. H. B. Paulsen. Canada: Mons. H. Winge Sørensen. Mr. E. MacLeod. Mons. A. Birkeland. United Kingdom: Denmark: Mr. A. T. A. Dobson. Mons. P. F. Erichsen. Mr. P. D. H. Dunn. Mr. J. Thomson. France: Mr. J. E. de Watteville. Mons. Noel Henry. Mons. A. Alloy. Mr. R. C. Cox. Mons. A. Perier. Mr. J. E. S. Fawcett. Mons. J. J. le Gall. Dr. N. A. Mackintosh. Mons. A. Anziani. Mr. J. R. S. MacLeod. Mons. P. Budker. Mr. R. H. Burt. Mr. A. G. Blake. Mexico: Mr. A. R. W. Harrison. Lieut. Commander Alfredo. Captain H. K. Salvesen. Marquez Ricano (Observer). United States of America: Netherlands: Dr. Remington Kellogg. Dr. Ira N. Gabrielson. Dr. J. J. Ovevaar. Dr. D. J. Van Dijk. Dr. Hilary J. Deason. Dr. A. G. U. Hildebrandt. Commander James D.Craik. Dr. Donald D. Kennedy. Newfoundland: Mr. Charles I. Bevans. Mr.J.L.Murphy(Observer). Dr. William E. S. Flory. New Zealand: Mr. John M. Allison. Mr. W. E. Pratt. Miss Zelda Wolf.

Mr. A. T. A. Dobson (United Kingdom) was invited to preside over the Conference, and Mr. A. M. Lowe and Miss U. Borenius (United Kingdom), assisted by a member of the United States of America Delegation, acted as Secretaries. The object of the Conference was to consider what special measure should be put in force by agreement in respect of the whaling season 1946/47. All the Governments represented at the Conference were parties or signatories to the International Agreement for the Regulation of Whaling signed at London on the 8th June, 1937.

The Conference having heard a statement on behalf of the Minister of Food of the United Kingdom on the present position of world stocks of oils and fats, and the prospects in the near future, came to the conclusion that, so far as whaling is concerned, some special relaxation of the Agreement of 1937 and the Protocol of 1938 was desirable for the season 1946/47.

On the other hand the Conference was impressed with two main considerations. In the first place it was of vital importance to further the conservation of existing whale stocks, which prior to the war were already showing signs of depletion. Secondly it was of equal importance that any temporary relaxation of the existing regulations should not serve to encourage countries that had not taken part in whaling operations before to enter the industry only to find that ultimately their expeditions might not prove financially profitable.

The Conference had the advantage of perusing a number of papers submitted by the various delegates, and in particular was grateful to the Norwegian Delegation for the very full statistical material relating to the whaling industry as a whole which was of inestimable value.

The Conference adopted at its final meeting the following resolutions: --

- 1) "That it is desirable that Protocol, in the terms of the Annex to this resolution, should be signed and brought into force as soon as possible; that the Government of the United Kingdom is requested to make early arrangements for the signature of this Protocol by duly accredited representatives; that as this Protocol makes certain temporary amendments to the Agreement of 1937, as amended by the Protocol of 1938, all Governments which are parties to those instruments should be invited either to sign the present Protocol or to accede thereto; that Governments which are signatories to the Agreement of 1937 and Protocol of 1938 but have not become parties thereto by ratification should be invited to ratify those instruments and to sign the annexed Protocol or to accede thereto; and that copies of this Final Act and the Annex thereto should be communicated to all such Governments which are not represented at the present conference and to any other interested Governments."
- II) "That the Governments parties or signatories to the 1937 Agreement take such measures as may be appropriate to facilitate the exchange of scientific and other data on whales and whaling. The Conference likewise recommends the interchange of experts on whale biology and collaboration among those Governments on research and scientific studies pertaining to whales."
- III) "That the regulations of the several Governments should provide that (1) the official measurements as required in Article 16 of the 1937 Agreement

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shall be taken by the inspector when the whale is at rest on deck or platform in accordance with the definition of ,,length" in Article 18 of that Agreement, and (2) the other data required by Article 16 shall be verified by the inspector at the time of tally."

The Conference considered a proposal by the Delegation of the United States of America that the contracting Governments should prohibit the sale, loan, or delivery of vessels, equipment or supplies designed especially for whaling operations, or known to be intended for such operations, to any Governments or the national of any Government not a party or a signatory to the whaling Agreement of 1937. The Conference, however, was unable, owing to uncertainty as to the necessary legislative powers in the various countries, to include these provisions in the Protocol, but recognising the vital necessity for this prohibition adopted the following resolution: —

IV) "That the various Governments should take all practicable steps to prohibit the sale, loan or delivery of vessels, equipment or supplies designed especially for whaling operations, or known to be intended for such operations, to any Government or the nationals of any Government not a party or a signatory to the whaling Agreement of 1937."

The Conference also gave consideration to urgent representations by the Norwegian and United Kingdom representatives that as, owing to unforeseen circumstances, certain factory ships would be unable to reach the whaling grounds by the 24th November, 1945, they should be permitted to operate with a full complement of catchers for a continuous period of four months from the date in which they were able to commence operations.

The Conference recognised the vital importance of acquiring all the oil possible during the 1945/46 season, and considered that it would be highly detrimental to world oil supplies if the limited number of expeditions were unable to fish for the full four months owing to circumstances not only beyond their control, but due primarily to the aftermath of the war.

While unable to include any provision on this subject in the Protocol on account of the difficulty of obtaining the necessary ratifications in time for this provision to be effective, the Conference adopted the following further resolution: —

V) "That every effort should be made to overcome the legal difficulties and obtain special authority for the required extension of the 1945/46 season in the case of the particular factory ships which cannot reach the grounds by the opening date."

Done in London the 26th day of November, 1945, in a single copy which shall be deposited in the archives of the Government of the United Kingdom of Great Britain and Northern Ireland, and of which certified copies shall be transmitted to all the signatory Governments.

> For the Government of the Union of South Africa: A. P. van der Post.

For the Government of the Commenwealth of Australia: C. G. Setter. V. C. Duffy.

For the Government of Canada: C. MacLeod.

For the Government of Denmark: P. F. Erichsen.

For the Government of France:Noel Henry.A. Alloy.Paul Budker.A. Anziani.

A. Perier.

For the Government of Mexico: A. Marquez Riano.

For the Government of the Netherlands: A. G. U. Hildebrandt.

For the Government of Newfoundland: J. L. Murphy.

For the Government of New Zealand: W. E. Pratt.

For the Gouvernment of Norway:	
Birger Bergersen.	John Melander.
H. Th. Knudtzon.	Harald B. Paulsen.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

A. T. A. Dobson.	J. E. S. Fawcett.
P. D. H. Dunn.	N. A. Mackintosh.
John Thomson.	Stuart MacLeod.
J. E. de Watteville.	R. H. Burt.
R, C. Cox.	A. G. Blake.

For the Government of the United States of America:Remington Kellogg.William E. S. Flory.Ira N. Gabrielson.Charles I. Bevans.Donald D. Kennedy.Hilary J. Deason.John M. Allison.James D. Craik.

Annex to Resolution No. I. Protocol.

The Governments of the Union of South Africa, the Commonwealth of Australia, Canada, Denmark, France, Mexico, the Netherlands, New Zealand, Norway, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.

Desiring, in view of the fact that pelagic whaling operations in the area defined by Article 7 of the International Agreement for the Regulation of Whaling signed at London on the 8th June, 1937 (hereinafter referred to as the Principal Agreement), as amended by the Protocol signed at London on the 24th June, 1938 (hereinafter referred to as the protocol of 1938), have been interrupted for a considerable period by the war, and in order to meet the emergency produced by postwar conditions without prejudice to the conservation of stocks of whales, to put into force by agreement such provisions as may be necessary in regard to pelagic whaling for the season 1946/47.

Have agreed as follows: —

Article 1.

Subject to the provisions of Article 4 of the present Protocol, the period fixed by Article 7 of the Principal Agreement during which factory ships or whale catchers attached thereto may be used for the purpose of taking or treating baleen whales, shall be extended for the season 1946/47 so as to cover the period from the 8th December to the 7th April inclusive.

Article 2.

Each contracting Government shall give notice to the Government of the United Kingdom when factory ships registered under the law of any territory under its authority or otherwise under its jurisdiction engage in whaling operations in the area defined by Article 7 of the Principal Agreement. The Government of the United Kingdom will inform the other contracting Governments of all notices received under this paragraph and shall itself similarly give notice to the other contracting Governments if factory ships registered under the law of any territory under its authority or otherwise under its jurisdiction engage in whaling operations in the said area.

Article 3.

The prohibition contained in Article 1 of the Protocol of 1938 relating to the taking of humpback whales in any waters south of 40° south latitude shall apply during the season of 1946/47.

Article 4.

(1) During the season of 1946/47 the number of baleen whales caught in the area defined by Article 7 of the Principal Agreement shall not exceed 16,000 blue whale units.

(2) For the purpose of paragraph 1 of this Article blue whale units shall be calculated on the basis that one blue whale equals

(a) Two fin whales or

- (b) Two and a half humpback whales or
- (c) Six sei whales.

(3) Each contracting Government undertakes to ensure that the International Bureau for Whaling Statistics shall be provided, within two days after the end of each calender week, with data on the number of blue whale units caught by each factory ship under the jurisdiction of the said Government in the area defined by Article 7 of the Principal Agreement. The Government of the United Kingdom shall consult from time to time with the International Bureau for Whaling Statistics and if it should appear that the annual quota provided by paragraph (1) of this Article may be reached before 7th April, the International Bureau for Whaling Statistics shall be requested to determine, on the basis of the data provided, the date on which the annual quota of blue whale units shall be deemed to have been reached and to notify each contracting Government of that date not less than two weeks in advance thercof. The taking of baleen whales in the said area shall be illegal after the date so determined.

Article 5.

The provisions of Article 3 paragraph (2) of the Protocol of 1938, regarding the operation of factory ships as land stations in the territorial waters of any contracting Government, shall not apply during the period from 1st May, 1947, to 31st October, 1947, inclusive.

Article 6.

(1) In the present Protocol the following expressions shall have the meanings assigned to them in Article 10 of the Principal Agreement: factory ship, whale catcher, land station, baleen whale, blue whale, humpback whale, fin whale.

(2) Sei whale means for the purposes of this Protocol any whale known by the name of Balaenoptera borealis, sei whale, Rudolphi's rorqual, pollack whale, or coal-fish whale, and shall be taken to include Balaenoptera brydei, Bryde's whale.

(3) The expression "land station" shall for the purposes of Article 4 of the present Protocol include a factory ship the movements and anchorage of which are confined to the territorial waters of any contracting Government.

Article 7.

(1) The present Protocol shall be ratified and the instruments of ratification deposited as soon as possible with the Government of the United Kingdom; and it shall be open to accession on behalf of any Government which is a party to the Principal Agreement and the Protocol of 1938 and has not signed the present Protocol.

(2) Accession shall be effected by notification addressed to the Government of the United Kingdom.

(3) The Government of the United Kingdom shall inform the Governments which are parties or signatories to the present Protocol of all ratifications of this Protocol or accessions thereto.

Article 8.

(1) The present Protocol shall come into force in its entirity when all the Governments referred to in the Preamble hereof shall have deposited their instruments of ratification or given notifications of accession.

(2) The provisions of this Article and of Articles, 2, 3, 4, 6 (1), 6 (2) and 7 of the present Protocol shall, when instruments of ratification have been deposited by at least three signatory Governments, become binding on those Governments and shall become binding on each other Government which subsequently ratifies or accedes on the date of the deposit of its instrument or ratification or notification of its accession.

(3) The ratification of or accession to the present Protocol by a Government which is not a party to the Principal Agreement and the Protocol of 1938 shall not become effective until such Government becomes a party to that Agreement and the Protocol of 1938.

Article 9.

The present Protocol shall bear the date on which it is opened for signature and shall remain open for signature for a period of 14 days thereafter.

In witness whereof the undersigned plenipotentiaries being duly authorised to this end by their respective Governments have signed the present Protocol.

Done at London this 26th day of November, 1945, in a single copy which shall remain deposited in the archives of the Government of the United Kingdom by whom certified copies will be transmitted to all the Governments referred to in the preamble.

> For the Gouvernement of the Union of South Africa: A. P. van der Post.

For the Government of the Commenwealth of Australia: J. S. Duncan.

For the Government of Canada: Vincent Massey. For the Government of Denmark: P. F. Erichsen.

For the Government of France: Noel Henry.

For the Government of Mexico: Alfonso de Rosenzwig Diaz.

For the Government of the Netherlands: E. Teixeira de Mattos.

For the Government of New Zealand: R. M. Campbell.

For the Government of Norway: Birger Bergersen.

For the Government of the United Kingdom of Great Britain and Northern Ireland.

A. T. A. Dobson. J. E. de Watteville.

For the Government of the United States of America: Remington Kellogg. Ira N. Gabrielson.

Supplementary Protocol.

The Governments of Canada, Chile, Denmark, Mexico, The Netherlands, New Zealand, Norway, the United Kingdom of Great Britain and Northern Ireland, and the United States of America:

Desiring, in view of the serious effect which the war conditions and those arising in the immediately postwar period have had on the world supply of whale oil, which is principally obtained from pelagic whaling operations which are regulated by the International Agreement for the Regulation of Whaling signed at London on the 8th June, 1937 (hereinafter referred to as the Principal Agreement) as amended by the Protocols signed at London on the 24th June, 1938, and the 7th February, 1944, to put into force by agreement certain supplementary provisions in regard to pelagic whaling for the season 1945/46:

Have agreed as follows: ---

Article 1.

(1) Notwithstanding the provisions of Article 7 of the Principal Agreement as amended by Article 1 of the Protocol of 7th February, 1944, but subject to the provisions of Article 3 of that Protocol, any factory ship which, through unforeseen circumstances, has been unable to reach the whaling grounds until after the 24th November, 1945, shall be permitted to continue whaling operations after the 24th March, 1946, for a period not exceeding two calendar months from that date, provided that in no case shall it operate for a total period in excess of four months, such period to be continuous.

(2) For this purpose a full complement of not more than ten whale catchers may be employed by each factory ship, regardless of the period which such catchers may have already spent on the whaling grounds.

Article 2.

The present Protocol shall come into force with respect to the Governments referred to in the preamble thereto on its signature on behalf of all the said Governments, except that the said Protocol shall come into force with respect to any Government signing subject to ratification upon receipt by the Government of the United Kingdom of notice of ratification.

In witness whereof, etc.

			Species of	of wholes	equalit					E	cpedition	5.
Geographical areas.	Blue.	Fin.	Hump- back.	Sel.	Sperm.		hers.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
									Barrel = $\frac{1}{6}$ ton. ¹)			
South Georgia	83	937	-	80	85	2)	1	1,191	64,782	2	-	12
pelagic whaling	$11,\!392$	17,757	2	1	1,853	3)	704	31,709	2,479,471		23	228
Coast of Africa:	2 3	324	176	25	482		-	1,035	40,419	⁴) l	_	11
Azores		_		_	-	5)	552	552	10,047	-	-	-
New Foundland .	1	64	7	-	6		-	78	2,950	1	-	1
Pacific North:	34	292		3	177	5)	59		, ,		1	4
California New Zealand	1	6	19 75	-	4		_	29 77				1
Coast of Japan and	1		.0						2,000			
Corea	15	252	- 33	429	1,306			2,035	25,143	6) -	-	45
Total	11,559	19,632	420	538	3,914	1	,316	37,379	2,65,333	6	29	302

Table No. I .- Whaling in 1939/40 and summer 1940.

¹) 1 ton = 1,016 kg. ²) Right-whale. ³) 1 right-whale, 703 "Baleen whales" without specification. ⁴) There are in reality two shore statices, but these are operated as one station, and catch figures are given in one schedule. ⁵) No specification. ⁶) No information of the number of shore stations in operation.

Table No. 2.-British whaling in 1939/40 and summer 1940.

	KUT, YANDONYATIA YANDINA	and a second	Species o	f whales	canobt				E	xpedition	s.
Geographical areas.	Blue.	Fin.	Hump- back.	Sel.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
							*	$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton }} =$			
South Georgia Antarctic,	23	389	-	38	36	-	486	25,350	1	-	6
pelagic whaling	3,207	7,249	2	1	116	¹) 704	$11,2^{-9}$	856,819		10	81
Coast of Natal	28	324	176	25	482	- 1	1,055	4 ,419	²) 1	_	11
New Foundland	1	64	7		6		78	2,95)	1		1
New Zealand	1		75	-	1		77	2,390	1	-	
\mathbf{T} otal	3,260	8,026	260	64	641	704	12,955	927,928	4	10	99

1) 1 right-whale, 703 "Baleen whales" without specification. 2) There are in reality two shore stations, but these are operated as one station, and eatch figures are given in one schedule.

Table No. 3.-United States' whaling in 1939/40 and summer 1940.

		CONTRACTOR AND A	Species o	of whales	caught.				Е	xpedition	s.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
Antarctic.								$\begin{array}{l} \text{Barrel} = \\ {}^{1/6} \text{ ton.} \end{array}$			
pelagic whaling California	147	$790\\6$	19	-	$42 \\ 4$	-	979 2 J	61,000 1,607	-1	1	$9 \\ 1$
Total	147	796	19		46	-	1,008	62,607	1	1	10

1

			Species o	f wholes	equalit					E	xpedition	s.
Countries.	Blue.	Fin.	Hump- back.	Sei.	Sei. Sperm.		Others. Total of whales.		Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
									$\begin{array}{rl} \text{Barrel} = \\ \frac{1}{6} \text{ ton.} \end{array}$			
British Empire	3,260	8,026	26 0	64	641	1)	704	12,955	927,928	4	10	- 99
Norway	3,885			-	920		_			_	10	79
Japan	3,704	3,168	141	432	2,194	2)	59	9,693	$593,\!499$	³) –	7	100
Panama	498	859			64			1,421	113,000	·	1	8
United States	147	796	19		46		-	1,008	62,607	1	1	10
Argentine	65	548	_	42	49	4)	1	705	39,432	1	-	6
Portugal	-	-		-	-	²)	552	552	10,047	-	-	
Total	11,559	19,632	420	538	3,914	1	,316	37,379	2,656,303	6	29	302

Table No. 4.—Whaling results for the various countries in 1939/40 and summer 1940.

 1 1 right-whale, 703 , Balcen whales " without specification. 2) No specification. 5) No information as to number of shore stations in operation. 4) Right-whale.

Table No. 5.—Average size of whales caught in the Southern Seas 1939/40.

Geographical areas.			Average size.		
Number of whales measured.	Cempany.	Males.	Females.	Total anim a ls.	
A. Blue-whales.		Engl. feet.	Engl. feet.	Engl. feet.	
South Georgia Males 44 Females 44 Total 88.	No. 1 ,, 2	$\begin{array}{r} 74.77 \\ 70.14 \end{array}$	$\frac{75.21}{73.03}$	$75.04 \\ 71.48$	
Females 44 J Average		71.09	73.73	72.41	
Antarctic, pelagic uhaling Males 2,862 Females 2,699 } Total 5,561.	No. 1 , 2 , 3 , 4 , 5 , 6 , 7 , 8 , 9 , 10 , 11 , 12 , 13 , 14 , 15	$\begin{array}{c} 77.39\\ 76.98\\ 77.03\\ 76.99\\ 77.23\\ 77.93\\ 77.05\\ 77.26\\ 76.85\\ 76.56\\ 76.56\\ 75.27\\ 75.93\\ 76.87\\ 72.99\\ \end{array}$	$\begin{array}{c} 80.36\\ 80.39\\ 80.00\\ 80.82\\ 79.89\\ 79.78\\ 78.96\\ 79.54\\ 79.41\\ 79.87\\ 79.68\\ 79.72\\ 79.33\\ 77.82\\ 77.22\\ \end{array}$	$78.87 \\78.61 \\78.48 \\78.45 \\78.39 \\78.37 \\78.34 \\78.34 \\78.25 \\78.20 \\78.17 \\77.66 \\77.54 \\77.36 \\75.33 \\$	
$\mathbf{Average}$		76.69	79.74	78.17	
B. Fin-whales.					
South Georgia Males 489 Females 448 Total 937.	No. 1 " 2	$\begin{array}{c} 62.33\\ 62.33\end{array}$	$\begin{array}{c} 63.74\\ 63.26\end{array}$	$\begin{array}{c} 63.04\\ 62.76\end{array}$	
Average		62.33	63.47	62.88	

Geographical areas.			Average size.	
Number of whales measured.	Company.	Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
Antarctic, pelagic whaling Males 5,684 Females 4,948 Total 10,632.	No. 1 $ \begin{array}{c} & 2 \\ & 3 \\ & 4 \\ & 5 \\ & 6 \\ & 7 \\ & 8 \\ & 9 \\ & 10 \\ \end{array} $	$\begin{array}{c} 66.67\\ 66.85\\ 66.91\\ 66.46\\ 67.20\\ 65.06\\ 66.41\\ 65.57\\ 65.37\\ 65.37\end{array}$	$\begin{array}{c} 71.67 \\ 70.18 \\ 69.80 \\ 69.91 \\ 69.17 \\ 69.77 \\ 69.38 \\ 69.54 \\ 68.40 \\ 67.01 \end{array}$	$\begin{array}{c} 68.93 \\ 68.38 \\ 68.26 \\ 68.19 \\ 68.12 \\ 67.91 \\ 67.75 \\ 67.50 \\ 66.64 \\ c5.47 \end{array}$
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 65.20 \\ 64.95 \\ 65.07 \\ 64.64 \\ 64.26 \\ 63.84 \end{array}$	$\begin{array}{c} 67.91 \\ 67.78 \\ 67.78 \\ 67.35 \\ 66.51 \\ 66.60 \end{array}$	$\begin{array}{r} 66.47 \\ 66.39 \\ 66.31 \\ 65.77 \\ 65.25 \\ 65.11 \end{array}$
Average		65.84	68.96	67.29
C. Sei-whales.South GeorgiaMales 30 FemalesFemales 50 Total 80.	No. 1 ,, 2	$48.00 \\ 46.82$	$49\ 92\ 50.52$	$49.26 \\ 49.02$
Average		47.33	50.22	49.14
Antarctic, pelagic whaling Female 1.	No. 1		49.00	
D. Sperm-whales.	No. 1	47.25		
Males 84.	" 2	45.79		
Average		46.42		
Antarctic, pelagic whaling Males 962.	No. 1 2 3 4 5 6 7 8 9 10 11	$56.00 \\ 54 13 \\ 53.39 \\ 53.31 \\ 52.67 \\ 52.50 \\ 52.43 \\ 52.43 \\ 52.19 \\ 52.14 \\ 51.82 $		
Average	$ \begin{array}{c} , & 11 \\ , & 12 \\ , & 13 \\ , & 14 \end{array} $	$51.83 \\ 51.73 \\ 51.63 \\ 51.46 \\ 52.33$		

Table No. 6.—Whales caught in the season 1939/40 and summer 1940, by species, sex and size.

Total Antarctic	Total	Anta	rctic.
------------------------	-------	------	--------

Blue-whales.

ļ	Nun	iber of	Total		Numb	er of	Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
58		1	1	81	220	172	392	
2.9	I	_	1	82	131	145	276	
60		_	2	23	126	146	272	
61	3		$\frac{2}{3}$	84	86	151	237	
62	4	3	7	85	45	154	199	
63	6	6	12	86	22	149	171	
64	10	10	20	87	23	117	140	
65	15	21	36	88	6	107	113	
66	21	13	44	89	3	74	77	
67	26	20	43	90		57	57	
68	32	22	54	91		40	40	
69	11	11	22	92		17	17	
70	215	147	362	93	1	6	7	
71	170	113	283	94		4	4	
$\frac{72}{73}$	131	124	2^{-5}	95	-	3	3	
73	145	9)	235	Sum	2,906	2,743	5,649	
$\frac{74}{75}$	137	94	231		2,000	(_, 10)		
75	199	135	334		[M	ales:	76.61 feet	
$\frac{76}{77}$	206	101	307	Average		emales:	79.64 "	
77	224	9.4	318	~		otal animal	s: 78.08 "	
78	232	122	354		í M	ales: 51.4		
79	187	115	302	Per		ares: 51.4 emales: 48.6		
80	253	159	415		(re	emaies: 40.6	50	

Fin-whales.

$\begin{array}{r} 47\\ 48\\ 49\\ 50\\ 51\\ 52\\ 53\\ 54\\ 55\\ 56\\ 57\\ 58\end{array}$	$ \begin{array}{c} - \\ 1 \\ - \\ 3 \\ 5 \\ 6 \\ 10 \\ 8 \\ 98 \\ 90 \\ 67 \\ 109 \end{array} $	$ \begin{array}{c} 1 \\ - \\ 3 \\ - \\ 5 \\ 5 \\ 6 \\ 79 \\ 82 \\ 80 \\ 103 \end{array} $	$ \begin{array}{c} 1\\ 1\\ 3\\ 6\\ 5\\ 11\\ 15\\ 14\\ 177\\ 172\\ 177\\ 212 \end{array} $	$\begin{array}{c} 69\\ 70\\ 71\\ 72\\ 73\\ 74\\ 75\\ 76\\ 77\\ 78\\ 79\\ 80\\ \end{array}$	$571 \\ 423 \\ 246 \\ 155 \\ 67 \\ 30 \\ 9 \\ 8 \\ 1 \\ 2 \\ 1$	$\begin{array}{c} 307\\ 421\\ 386\\ 448\\ 423\\ 3^{3}4\\ 318\\ 203\\ 105\\ 63\\ 21\\ 14 \end{array}$	$\begin{array}{r} 878\\ 844\\ 632\\ 573\\ 490\\ 414\\ 327\\ 211\\ 106\\ 65\\ 22\end{array}$
$59 \\ 60 \\ 61$	$153 \\ 211 \\ 213$	$ 100 \\ 197 \\ 129 $	$253 \\ 408 \\ 342$	81 	6,173	$\frac{2}{5,396}$	$ \begin{array}{r} 14 \\ 2 \\ \hline 11,569 \end{array} $
62 63 64 65 66 67 68	$\begin{array}{c} 258 \\ 328 \\ 450 \\ 612 \\ 648 \\ 702 \\ 688 \end{array}$	$151 \\ 185 \\ 213 \\ 215 \\ 197 \\ 253 \\ 289$	409 513 663 807 845 900 977	Averag Per	ge size { Fe Te	ales: emales: otal anima ales: 53 emales: 46.	36

Table No. 6 (continued).

	Num	ber of	Total		Num	Total		
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	anim als .	
40		1	1	52	1	5	6	
41	1	-	1	53		5	5	
42		-		54		8	8	
43		-					<u>.</u>	
44	1	2	3	Sum	30	51	81	
45	5	-	5	1				
46	3	3	6	and the second se	(M	[ales:	47.33 feet	
47	4	2	6	Average	e size { F	emales:	50.20 "	
48	7	5	12	0	T	otal animal	s: 49.14 "	
49	4	4	8		•			
50	4	9	13	Per	$\operatorname{cent} \left\{ \begin{array}{c} \mathcal{M} \\ \mathcal{M} \end{array} \right\}$	[ales: 37.0 emales: 62.9	7 1 1 <i>0</i>	
51		7	7		t J	emales: 62.	10	

Sei-whales.

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.	Engl. feet.	Number of males.
$ 38 \\ 39 \\ 40 \\ 41 \\ 42 \\ 43 \\ 44 \\ 45 $	$egin{array}{c} 3 \\ 4 \\ 7 \\ 3 \\ 7 \\ 4 \\ 11 \\ 16 \end{array}$	47 48 49 50 51 52 53 54	$30 \\ 50 \\ 59 \\ 90 \\ 92 \\ 152 \\ 138 \\ 159 $	$56 \\ 57 \\ 58 \\ 59 \\ 60 \\ 61 \\ 62$	
40	10	55 55	$\begin{array}{c}152\\99\end{array}$	Sum	1,046

Average size: Males: 51.86 feet.

a. South Georgia.

Blue-whales.

Engl. feet.	Number of		Total		Number of		Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
60	2	_	2	79	_	1	1	
61	1	-	1	80	1	1	2	
62		1	1	81	1	1	2	
63	-	-		82			-	
64	1		1	83		1	1	
65	1		1	84	1	3	4	
68	18	14	32	$9\overline{5}$	_	Ĩ	1	
71	7	6	13	Sum	41			
72	2	4	6	Bum	T f			
73	$\frac{2}{5}$	4	9		(M	ales:	71.09 feet	
74	·	3	3	Averag		emales:	72 2	
75	1	$\frac{3}{2}$	3			otal anima	la. 79 /1	
76	_	ī	ĩ					
77	2	_	$\tilde{2}$	\mathbf{Per}	$\operatorname{cent} \left\{ \begin{array}{c} M \\ D \end{array} \right\}$	ales: 50	00	
78	ī	1	$\tilde{2}$	101	for the Fe	emales: 50	00	

Table No. 6 (continued

Engl. feet.	Number of		Total		Number of		Total
	males.	females.	animals.	Engl. feet.	males.	females.	animals.
50	1	1	2	70	6	19	25
52	1	1	2	71	3	17	20
55	47	36	83	72	1	20	21
56	22	29	51	73	-	6	6
57	18	21	39	74		7	7
58	13	20	33	75		6	6
59	28	19	47	76	-	3	3
60	42	37	79	77		2	$\frac{2}{2}$
61	24	17	41	78		2	2
62	30	21	51	Sum	489	448	937
63	39	26	65			1 220	
64	44	28	72		ſN	[ales:	62.33 feet
65	52	24	76	Averag	e size { F	emales:	63.47 ,,
66	43	27	70		T]	otal anima	ls: 62.88 "
67	30	23	53		()	falor, 59	
68	27	25	52	Per	$\operatorname{cent} \left\{ \begin{array}{c} n \\ \overline{n} \end{array} \right\}$	Iales:52'emales:47	.1 <i>0</i>
69	18	11	29		(r	emales: 41	.01

Fin-whales.

Sei-whales.

$\begin{array}{c c} 40\\ 41 \end{array}$	- 1	1	1	$53\\54$		58	5 8
44 45	$\begin{array}{c c}1\\5\\\end{array}$	$\frac{2}{2}$	3 5	Sum	30	50	80
$\begin{array}{c} 46\\ 47\\ 48 \end{array}$	3 4 7	$\frac{3}{2}$	6 6 12	A 170700 (fales:	47.33 feet
49 50	4	3	12 7 13			females: fotal animals	
$51\\52$	1	$\begin{bmatrix} 3\\7\\5 \end{bmatrix}$	7 6	Per	$\operatorname{cent} \left\{ \begin{array}{l} \mathbf{I} \\ \mathbf{I} \end{array} \right\}$	Males: 37.5 Females: 62.5	50 50

Sperm-whales.

Engl. feet.	Number of males	Engl. feet	Number of males	
38	3	49	2	
39	4	50	7	
4 0	7	51	2	
41	3	52	8	
42	6	53	3	
43	1	54	2	
44	8	55	2	
45	9	56	2	
46	3	57	1	
47	4		-	
48	7	Sum	84	

Average size:- Males: 46.42 feet.

b. Antarctic, pelagic whaling.

Engl. feet.	Number of		Total		Number of		Total
	males.	females.	animals.	Engl. feet.	males.	females.	animals.
58	_	1	1	81	219	171	390
59	1	-	1	82	131	145	276
60	-	-	-	83	$126 \\ 0.5$	145	271
61 62	2	-	2	84	85	148	233
62 62	4	2	6	85	45	154	199
63 64	6		12	86	$\frac{22}{23}$	$\begin{array}{c}149\\117\end{array}$	$\frac{171}{140}$
64 65	9	10	19	87	23 6		140
65	14	21	35	88		$\begin{array}{c}107\\74\end{array}$	$113 \\ 77$
$\frac{66}{67}$	31	13	44	89	3	74 57	57
67 69	26 20	20	46	90 01		$\frac{57}{40}$	40
68 60	32	22	$54 \\ 22$	91 02		17	$\frac{40}{17}$
$\begin{array}{c} 69 \\ 70 \end{array}$	11	11		92 02			7
$\frac{70}{71}$	$\begin{array}{c} 197 \\ 163 \end{array}$	$\begin{array}{c} 133 \\ 107 \end{array}$	330	93 94	1	6	1
$\frac{71}{72}$	105	107	$\begin{array}{c} 270 \\ 249 \end{array}$	94 95	-	$\frac{4}{2}$	${4 \over 2}$
73^{12}	129	86	249	-	-		Manufacture in a second with the second second second
$73 \\ 74$	140	91	220	Sum	2,862	2,699	5,561
75^{+}	197	133	331		(M	ales:	76.69 feet
$\frac{15}{76}$	206	100	306	Averag		emales:	E0 E4
77	$\frac{200}{222}$	94	316	21 Verag		otal animal	
78	231	121	352		-		
79	187	114	301	Per	r cent { M	ales: 51.4	47
80	255	158	413	10	· · · · · · · · · · · · · · · · · · ·	emales: 48.	53

Blue-whales.

Fin-whales,

47	_	1	1	69	553	296	849
48	1	T		$\frac{09}{70}$	$\frac{553}{417}$	$\frac{250}{402}$	819
49	1	3	$\frac{1}{3}$	$\frac{70}{71}$	$\frac{417}{243}$	$\frac{402}{369}$	612
$\frac{10}{50}$	1	$\frac{3}{2}$		$71 \\ 72$	124	$\frac{503}{428}$	552
$50 \\ 51$	$\begin{array}{c} 2\\ 5\end{array}$	4	$\frac{4}{5}$	$72 \\ 73$	67	417	484
$51 \\ 52$	$\frac{5}{5}$	4	9	$73 \\ 74$	30	377	407
$52 \\ 53$	10	$\frac{4}{5}$	15		9	$312 \\ 312$	321
				$75 \\ -75$	-		
54_{-5}	8	6	14	$\frac{76}{77}$	8	200	208
$55 \\ 52$	51	43	94	77	1	103	104
56	68	53	121	78	2	61	63
57	79	59	138	79	1	21	22
58	96	83	179	80	-	14	14
59	125	81	206	81	-	2	2
60	169	160	329				
61	189	112	301	Sum	5,684	4,948	10,632
62	228	130	358		,	1,010	10,002
63	289	159	448		ſM	ales:	65.84 feet
64	406	185	591	Averag	e size { F	emales:	68.96 "
65	560	191	751	G		otal anima	
66	605	170	775		,		
67	672	235	907	Per		ales: 53.	
68	661	264	925		(F	emales: 46	.54

Engl. feet.	Number of males.	Engl. feet.	Number of males.	Engl. feet.	Number of males.
42	1	50	83	58	16
43	3	51	90	59	3
44	3	52	144	60	1
45	7	53	135^{-1}	61	
46	14	54	150	62	1
47	26	55	97		
48	43	56	58	Sum	962
49	57	57	30	Jun	002

Sperm-whales.

Average size:- Males: 52.33 feet.

s.
Female.

49	1
phone and the second se	

Humboldt Bay, California, summer 1940.

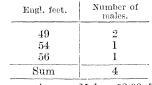
Fin-whales.

Engl. feet.	Number of		Total	
	males.	females.	animals.	(Males: 63 33 feet
$58\\61$	1	-	1	Average size $\begin{cases} \text{Females:} & 65.67 \\ \text{Total animals:} & 64.50 \\ \end{cases}$
66 70	2		$\begin{array}{c} 1\\ 3\\ 1\end{array}$	$\begin{array}{llllllllllllllllllllllllllllllllllll$
Sum	3	3	6	

Humpbacks.

Engl. feet.	Number of		Total		Number of		Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animal	s.
36	_	1	1	48		1	1	
37	1	-	1	50		1	1	
39	1		1	Sum	10	9	19	
40	-	1	1	Sum	10	9	19	
41	3		3		(M	[ales:	41 60	feet
42	1		1	Averag	Average size { Females:			
43	2		2	ii		otal animal	44 67 s 43 05	,,
44	1	1	2		· ·			,,
45	1	2	3	Per	cent {	lales: 52. emales: 47.	03 97	
47		2	2		(r	emales: $47.$	31	

Sperm-whales.



Average size:- Males: 52.00 feet

Table No. 7.—Whales caught in the season 1939/40 in the Antarctic, by species, sex and groups of size.

Total Antarctic.

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)	610 $4,410$ 629 $5,240$	10.80 78.07 11.13
Total Immature males ,, females animals		
" animais Mature males " females " animals	$ \begin{array}{r} 2,104 \\ 1,832 \\ 3,936 \end{array} $	

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) Total	$\begin{array}{r} 233 \\ 3,976 \\ 7,360 \\ \hline 11,569 \end{array}$	$\begin{array}{r} 2 \ 01 \\ 34 \ 37 \\ 63.62 \\ \hline 100.00 \end{array}$
Immature males	$\underbrace{\begin{array}{c}1,262\\1,342\\2,604\end{array}}$	$\begin{array}{r} 20.44\\ \underline{24.87}\\ \underline{22.51}\end{array}$
Mature males " females " animals	$\frac{4,911}{4,054}$ 8,965	$\frac{79.56}{75.13}$ 77.49

a. South Georgia.

Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less)	38	43.18
" ² . (71 feet to and including 85 feet)	49	55.68
" 3. (above 85 feet)	1	1.14
Total	88	100.00
mmature males	37	84.09
,, females	35	79.55
" animals	72	81.82
Mature males	7	15.91
" females	9	20.45
" animals	16	18.18

	Number of whales.	Per cent.
Group 1. (55 feet and less)		$9.28 \\ 59.13 \\ 31.59$
Total	937	100.00
Immature males	$\begin{array}{c} 226 \\ 256 \end{array}$	$\begin{array}{c} 46.22\\ 57.14\end{array}$
" animals	482	51.44
Mature males, females	$\frac{263}{192}$	$\begin{array}{c} 53.78\\ 42.86\end{array}$
,, animals	455	48.56

Fin-whales.

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)	$572 \\ 4,361 \\ 628$	$10.29 \\78.42 \\11.29$
Total	5,561	100.00
Immature males	765	26.73
" females	$\frac{876}{1.641}$	$\frac{32.46}{29.51}$
	1,011	20.01
Mature males females	$2,097 \\ 1,823$	$\begin{array}{c} 73.27 \\ 67.54 \end{array}$
" animals	$\frac{1,825}{3,920}$	$\frac{07.34}{70.49}$

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)	$\begin{array}{c c}146\\3,\!422\\7,\!064\end{array}$	$1.37 \\ 32.19 \\ 66.44$
Total	10,632	100.00
Immature males	$1,036 \\ 1,086$	$\begin{array}{c}18.23\\21.95\end{array}$
" animals	2,122	19.96
Mature males	$4,648 \\ 3,862$	$81.77 \\ 78.05$
" animals	8,510	80.04

Table No. 8.—Average production of oil per blue-whale unit in the Antarctic in the season 1939/40.

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	$\begin{array}{c} 346.5\\ 223.8\end{array}$	$36,987 \\ 23,550$	$\begin{array}{c}106.7\\105.2\end{array}$		
Average				106.1		
Antarctic, pelagic whaling	No. 1 " 2 " 3 " 4 " 5 " 6 " 7 " 8 " 9 " 10 " 11 " 12 " 13 " 14 " 15 " 16 " 17 " 18 " 19 " 20 " 21	$\begin{array}{c} 520.0\\ 628.0\\ 393.5\\ 668.0\\ 955.0\\ 809.2\\ 601.5\\ 721.8\\ 816.0\\ 775.5\\ 587.0\\ 873.5\\ 638.5\\ 927.5\\ 756.0\\ 997.0\\ 699.0\\ 699.0\\ 693.0\\ 872.0\\ 542.0\\ 831.0\\ \end{array}$	$\begin{array}{c} 68,450\\ 80,885\\ 50,500\\ 84,802\\ 120,150\\ 100,975\\ 75,(00\\ 89,498\\ 100,600\\ 95,300\\ 71,081\\ 104,076\\ 75,700\\ 109,665\\ 88,196\\ 116,000\\ 81,200\\ 78,000\\ 96,800\\ 53,480\\ 88,512\end{array}$	$\begin{array}{c} 131.6\\ 128.8\\ 128.3\\ 126.9\\ 125.8\\ 124.8\\ 124.7\\ 124.0\\ 123.3\\ 122.9\\ 121.1\\ 119.1\\ 118.6\\ 118.2\\ 116.7\\ 116.3\\ 116.2\\ 112.6\\ 111.0\\ 107.9\\ 106.5 \end{array}$		
Average		•••		119.8		

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

Table No. 9.- Whale foetuses.

I. Blue-whale foetuses

measured in the Southern Seas in the season 1939/40.

Date when	Le	Sex.	Date Sex. when		Length.		Sex.	Date when		Ler	ngth.	Sex.	
measured.	Mother.	Foetus	bex.	measu		Mother.	Foetus.	Sex.	measu		Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
${}^{13}/_{11}$ 39 ${}^{23}/_{11}$,, ${}^{25}/_{11}$,, ${}^{8}/_{12}$,, ,, ,,	84 70 80 79 85 88	2' 6'' 4' 6'' 3' 0'' 6' 0'' 6' 0'' 6' 6'' 4' 0'' 0'' 0'' 0'' 0'' 0'' 0'' 0'' 0'	F F M F M F	8/12 ,, ,, ,, ,, ,,	39 ,, ,, ,, ,,	79 77 83 90 85 90	5' 0'' 3' 0''' 8' 0''' 6' 0'''' 7' 0'''' 5' 0''''	F F M M M	8/12 9/12 ,, ,, ,,	39 ,, ,, ,, ,,	$ \begin{array}{c} 77 \\ 86 \\ 86 \\ 90 \\ 94 \\ 83 \\ \end{array} $	5'0'' 5'0'' 10'0''' 5'0''' 6'0''' 7'0''	M F F F F
>> >> ->> >>	$\frac{86}{79}$	5'0'' 6'0''	\mathbf{M} \mathbf{F}	"	" "	86 80	5'0" 3'0"	M F	,, ,,	,, ,,	$\begin{array}{c} 89 \\ 82 \end{array}$	$\begin{vmatrix} 3' 0'' \\ 7' 0'' \end{vmatrix}$	M F

 $Table \ No. \ 9. \\ --Blue \ whale \ foetuses \ ({\rm cont.}).$

Date		Le	ngth.	Sex.	Da		Lei	ngth.	Sex.	Dat whe		Ler	ngth.	Sex.
measu		Mother.	Foetus.	SCA.	meas		Mother.	Γoetus.	bex.	meast		Mother.	Foetus.	
		Engl. ft.	Eagl. ft.				Engl. ft.	Engl. ft.				Engl.ft.	Engl. ft	
9 , 12	39	89	10' 0"	F	$\frac{13}{12}$	39	87	7' 0"	F	$^{16}/_{12}$	39	80	6′ 0″	F
,,	,,	$\frac{83}{86}$	$\frac{7'0''}{9'0''}$	M M	;,	,,	$\frac{85}{86}$	$rac{8'0''}{3'0''}$	\mathbf{F} \mathbf{F}	,,	,,	$\begin{array}{c} 75 \\ 86 \end{array}$	$\frac{4'0''}{3'0''}$	\mathbf{F} M
,,	;,	84	$\frac{50}{7'0''}$	F	;,	,,	$\frac{86}{83}$	50 6'0″	F	,,	,,	87	3 0 7′ 0″	F
10, 12	,, 	84	6′ 0″	M	,, ,,	,, ,,	85	8'0"	$\hat{\mathbf{F}}$,, ,,	,, 	75	5'0"	M
,,		84	3'0''	М	,, ,,	,,	81	6′0″	\mathbf{F}	,,	,, ,,	85	7'0''	\mathbf{F}
,,	,,	82	5'0''	M	,,	,,	84	4'0''	M	17/12	,,	92	3'0''	M
,,	,,	82	$\frac{4'0''}{c'0''}$	F	,,	,,	$\frac{86}{96}$	5'0''	M	$\frac{17}{12}$	"	84 96	5'0''	F F
,,	••	$\frac{85}{85}$	6' 0'' 7' 0''	F F	"	57	$\frac{86}{83}$	$\frac{3'9''}{7'3''}$	\mathbf{F} \mathbf{F}	,,	,,	$\frac{86}{83}$	6'0" 9'0"	F F
,,	••	83	4'0"	F	14/12	,,	85	8'0"	F	,,	,,	84	10'0"	F
,, ,,	" "	86	3 ′ 0″	$\hat{\mathbf{F}}$,12	" "	83	3' 6"	Ĩ	,, ,,	" "	88	9'0 ″	F
,,	,,	88	5'0''	\mathbf{F}	,,	,,	83	6'0"	M	,,	,,	88	11'0"	Μ
,,	,,	85	5' 3"	M	,,	,,	83	4'0''	M	,,	,,	80	6'0"	M
11,12	,,	83	6'4''	M	;,	,,	86	$\frac{6'0''}{5'0''}$	F	,,	,,	91	13'0'' 5'0''	\mathbf{F} \mathbf{F}
/ 12	,,	$\begin{array}{c} 85\\83\end{array}$	5' 0'' 6' 0''	M M	,,	,,	88 84	$5'0'' \\ 10'0''$	F F	,,	,,	$\begin{array}{c} 85 \\ 79 \end{array}$	$\frac{50}{7'0''}$	F
,,	,, 	87	7'0"	F	,,	"	91	6'0"	M	**	», ••	81	5'0″	M
,, ,,	,, ,,	88	4 ' 0"	F	,, ,,	,, ,,	85	4'0''	F	,, ,,	" "	87	7'0''	M
,,	,,	80	4' 0''	\mathbf{F}	,,	,,	92	5'0''	M	,,	,,	80	7' 0"	F
,,	,,	85	6' 0"	M	,,	,,	72	1'0"	M	,,	,,	84	8'0"	M F
,,	;,	81	5'0'' - 6'0''	M F	••	••	$\frac{81}{74}$	$\frac{9'0''}{14'0''}$	M M	••	"	88 83	5'0″ 10'0″	M
"	,,	$\begin{array}{c c} 81\\ 91\end{array}$	3'0''	M	,,	,,	89	3'0"	M	18/12	,,	92	5'0''	M
" "	,, ,,	84	6'0"	M	"	"	86	10' 0"	F			84	7' 0"	\mathbf{F}
,,	,,	83	2'6''	\mathbf{F}	,, ,,	,, ,,	78	3' 0"	M	" "	,, ,,	87	11'0"	\mathbf{F}
,,	,,	89	6'0"	M	,,	,,	84	5'0"	Μ	,,	"	82	10'0"	M
,,	,,	87	7'0''	F	,,	,,	79	5'0''		,,	,,	83	$2'6'' \ 5'0''$	M M
,,	,,	$\begin{vmatrix} 85\\ 84 \end{vmatrix}$	5'0'' 5'0''	$ \mathbf{F} $ \mathbf{F}	,,	,,	$\frac{85}{83}$	5'0'' 3'0''	M M	,,	,,	$\begin{array}{c} 83\\85\end{array}$	$\frac{50}{6'0''}$	M
,,	,,	82	6'0 "	F	,,	,,	84	5 0 6' 0"	F	"	"	88	10'0"	F
$\frac{12}{12}$,, ,,	89	4'0"	M	" "	" "	88	7'0"	\mathbf{F}	" "	" "	89	5'0''	M
,,	,,	83	10'0''	\mathbf{F}		;,	78	1'6''	\mathbf{F}	,,	,,	79	5'0''	F
,,	,,	87	6' 6"	M	¹⁵ /′12	,,	85	10'0''	F	,,	,,	94	4'0''	M F
,,	••	$\begin{array}{c c} 91 \\ 80 \end{array}$	3'0'' 7'0''	M M	,,	,,	$\begin{array}{c} 80\\ 82\end{array}$	$5' 0'' \ 3' 0''$	M M	,,	,,	81 83	${12'0''\over 8'0''}$	г М
,,	,,	86	$\frac{1}{7'0''}$	F	,,	,,	$\frac{82}{84}$	5 0 6'0"	M	,,	,,	84	6'0"	M
,, ,,	,, ,,	87	7' 0"	\mathbf{F}	" "	" "	85	5'0''	F	,, ,,	" "	87	5'0''	Μ
,,	,,	87	8'0"	Μ	,,	,,	88	3' 0"	Μ	,,	,,	79	5'0"	M
,,	,,	79	$\begin{vmatrix} 3' 0'' \\ 8' 0'' \end{vmatrix}$	F	,,	,,	91 84	$\frac{4'0''}{6'0''}$	M	,,	,,	81	$\frac{6'0''}{6'0''}$	F M
,,	,,	$\begin{array}{c c} 81\\ 84 \end{array}$	8'0" 6'0"	\mathbf{F} \mathbf{F}	,,	,,	84 86	$rac{6'0''}{5'0''}$	M F	,,	,,	$\begin{array}{c} 84\\ 86\end{array}$	00 11'0″	F
,, ,,	" "	82	5'0''	F	"	"	80	14'0''	M	"	" ··	84	10'0''	F
"	,, ,,	80	4' 0"	\mathbf{F}	"	,, ,,	76	2'0''	F	19/12	" "	77	3'0''	Μ
,,	,,	82	5'0"	F	,,	,,	88	4'0''	M	,,	,,	87	2'6''	F
,,	,,	81	$\begin{array}{c} 14'0'' \\ 2'0'' \end{array}$	F	,,	,,	83	${3'0''\over 2'0''}$	F	,,	,,	81	$7'0'' \\ 6'0''$	${f M}{f F}$
,,	"	$\frac{85}{83}$	$\frac{2}{7'}\frac{0''}{0''}$	M M	,,	,,	81 84	$\frac{2}{12'}\frac{0''}{0''}$	F M	"	••	88 83	$\frac{60}{4'0''}$	г F
,, 	»,	88	7'0"	M	,,	,,	81	$\frac{12}{7'0''}$	M	,,	"	88	5'0''	M
,, ,,	" "	88	5'0''	F	,, ,,	,, ,,	84	5' 0''	F	,, ,,	,, ,,	84	9'0''	\mathbf{F}
,,	••	78	4′ 0″	Μ		,,	88	5'0''	\mathbf{F}	,,	,,	83	5'0''	M
••	,,	85	7'6''	M	16/12		90	$\frac{7'}{2}0''$	M	,,	,,	87	$\frac{9'0''}{5'z''}$	M
13	;,	$\frac{83}{88}$	$\frac{11'8''}{3'0''}$	F M	,,	,,	83 86	$\frac{5'0''}{8'6''}$	F M	20	,,	80 89	5'5'' = 7'0''	${ m F}{ m M}$
. 12	••	80 87	3 () 9' 0"	M M	,,	••	$\frac{86}{79}$	$\frac{5}{5'}\frac{6}{0''}$	\mathbf{F}	, 12	,,	89	5'0"	M
,, ,,	" "	84	6'0"	F	" "	" "	85	7'0"	$\mathbf{\hat{F}}$,, ,,	,, ,,	85	11'0''	\mathbf{F}
,,	,,	82	5'0"	M	,,	"	83	3' 3''	M	,,	,,	85	7'0''	F
**	,,	88	10'0"	M	,,	,,	80	5'0''	\mathbf{F}	,,	,,	81	5'0''	М

Date	Le	ngth.	Gam	Da		Ler	ngth.	G	Dat		Ler	igth.	Corr
when measured.	Mother.	Foetus.	Sex.	wh measi	en ired.	Mother.	Foetus.	Sex.	whe measu	en ired.	Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl.ft.	
$^{20}/_{12}$ 39	85	5'0"	M	26/12	39	87	6' 0"	M	31/12	39	89	9'0''	M
,, ,,	94	6'0"	F	,,	,,	80	7'0''	\mathbf{F}	,,	,,	83	1'6''	M
,, ,,	81	6'0"	M	,,	,,	85	6'0"	M	,,	,,	81	6'0''	\mathbf{F}
,, ,,	89	5'6''	M	,,	,,	81	5'0''	M	,,	,,	82	7'0''	M
,, ,,	85	4'0''	M	,,	,,	85	5'0"	F	,,	,,	85	5'0''	M
·· ··	88	7'6''	$ \mathbf{F} $,,	,,	81	6'0"	F	,,	,,	81	2'0''	M
	82	8'0″	M	,,	,,	81	11'0"	M			89	7'0''	F
$\frac{21}{12}$,	86	7'0"	M	,,	,,	84	11′ 0″	M	1/1	40	90	3' 0''	\mathbf{F}
,, ,,	84	7'0"	M	,,	,,	83	8'4"	F	,,	,,	83	7' 0"	F
,, ,,	81	4'0"	M	27/12	,,	84	4'0"	F	,,	,,	81	6′0″	M
·· ·;	78	11'0"	F	,,	,,	85	15'0''	M	,,	,,	89	12'0"	F
,, ,,	76	5'0"	M	,,	,,	85	6'0 "	M	,,	,,	85	2'0''	F
,, ,,	84	7'6"	F	,,	,,	88	7'0"	M	,,	• •	83	11'0"	M
	81	12'0''	M	,,	,,	80	$\begin{vmatrix} 6' 0'' \\ c' 0'' \end{vmatrix}$	F	,,	,,	84	8'0"	M
22/12 ,,	78	11'0"	M	,,	,,		6'0"	F	,,	,,	81	14'0"	M
,, ,,	84	4'0''	M	287	,,	83	9'0''	F	,,	,,	83	8'0" 5'0"	M
,, ,,	85	4'0''	M	²⁸ /12	,,		4'0''	F	,,	,,	74	5'0'' 7'0''	M
,, ,,	87	2'0''	M	,,	••	84	$\frac{3'0''}{10'0''}$	M	,,	,,	83	4'0"	$\mathbf{M} \mathbf{F}$
** **	$\begin{array}{c} 89\\81\end{array}$	10'0'' 9'0''	F	,,	,,	86	10' 0'' 2' 6''	M F	,,	,,	80	$\frac{4}{9'6''}$	r F
******	85	6'0''	M F	,,	,,	88	$\frac{2}{7'} \frac{0''}{0''}$	F	·	,,	79	4'0"	F
** **	85	6'6"	Б Г	,,	,,	85 83	10'0"	F	,,	,,	78	11'0"	F
,, ,,	77	5'2''	M	,,	••	91	5'0''	F	,,	"	79	$\frac{11}{7'0''}$	M
,, ,,	82	10'9"	M	••	,,	85	6'0"	M	2]/1	,,	87	4'6"	F
²³ / ₁₂ ,,	89	$\frac{10}{9'0''}$	F	,,	,,	84	3'0"	F		,,	86	14'0"	M
	85	10' 0"	M	,,	,,	77	6'0"	F	,,	,,	84	11'0"	M
»	85	11'0"	F	**	••	80	7'0''	M	,,	"	85	7'0"	M
** **	86	10'0"	M	22	"	80	8'2"	M	,,	"	85	7' 0"	M
** **	86	7' 0"	F	,,	••	78	8'0"	M	,,	"	82	6'0"	F
** **	84	7' 0"	F	,,	••	80	11'5''	M	,,	"	77	7' 0"	F
·, ·,	86	5' 0"	M	,,	,,	86	8'3"	F	**	"	80	8' 0"	M
·· ··	86	6' 0"	M	29/12	,,	83	8'0"	F	,,	,,	77	4'7"	M
" " " "	87	6' 6''	F	2	••	86	8'0"	M	"	,,	86	6'0"	\mathbf{F}
·· ·· ·· ··	84	7' 0"	F	**	"	89	11'0"	F	3/1	,, ,,	87	10' 0"	F
,, ,,	82	13'0"	M	" "	" "	83	11'0"	M	,,	,,	79	2'6''	F
,, ,,	80	6.0"	F	,,	;,	83	7'0"	M	,,	,,	83	11'0"	Μ
,, ,,	89	11'0"	M	,,	,,	92	10'0"	M	,,	,,	84	9' 0"	M
,, ,,	87	10' 0"	Μ	,,	,,	85	10'0"	F	,,	,,	81	7' 0"	M
·· ··	86	3′ 8″	F	,,	,,	84	8'0"	M	,,	,,	88	10'0"	Μ
,, ,,	82	6 2''	F	,,	,,	81	5' 0"	F	,,	,,	86	11' 0"	Μ
,, ,,	84	10' 2"	F	,,	,,	71	4'0"	F		,,	84	9'4''	F
	80	7'2"	F	,,	,,	75	10'0"	F	4/1	,,	87	8'0"	F
24/12 ,,	89	17'0"	M		••	83	5'0''	M	,,	,,	90	7'0"	M
,, ,,	88	9'0"	F	³⁰ /12	,,	82	2'0''	F		,,	87	9'0"	F
·, ,,	80	9'0"	M			86	∫ <u>3</u> ´0″	F	5/1	"	83	6'0"	M
·· ··	89	13'0"	M	,,	,,		13'0''	F	,,	"	85	6'0''	F
·· ··	87	4'0''	M	,,	,,	86	7'0''	F	,,	"	86	9'0''	M
,, ,,	83	3'0''	F	>>	,,	86	6'0"	M	,,	,,	88	7'0''	M
25 / 25 /	86	4'0''	M	,,	,,	89	9'0"	F	,,	,,	79	7'0''	M
²⁵ / ₁₂ ,,	86	6'0''	F	,,	,,	81	8'0"	M	,,	,,	82	6'0"	M
,, ,,	88	7'0''	F	,,	,,	86	2'0''	M	,,	,,	87	8'0"	F
,, ,,	79	5' 6''	F	• • •	"	87	9'0''	F	,,	,,	87	4'0''	M
·, ,,	83	7'0"	F	,,	"	84	5'0''	F	,,	,,	77	7'0"	F
·· ·,	85	5'0''	M	•••	,,	89	9'0''	F	,,	"	90	13'0''	M
» »	84	10'0''	F	,,	"	83	7'0''	M	,,	,,	76	9'0"	F
» »	90	6' 6" 9' 0"	F	,,	,,	91	9'0''	F	6"/1	,,	84	9'0" 4'0"	F
26/12 "	88	$\begin{array}{c c} 9'0' \\ 4'0'' \end{array}$	\mathbf{F} \mathbf{F}	,,	,,	84	7'0" 5'0"	F	11	,,	$\begin{array}{c} 88 \\ 75 \end{array}$	$\begin{vmatrix} 4' 0'' \\ 10' 0'' \end{vmatrix}$	F M
- / 12 ,,	81	1 + 0	$ \mathbf{r} $	" "	"	87	190	M	l ,,	"	10	110.0	l m

Table No. 9.—Blue-whale foetuses (cont.).

Date when		Lei	igth.	Sex.	Da whe		Ler	ngth.	Sex.	Dat who		Ler	igth.	Sex.
measure	ed.	Mother.	Foetus.	Sex.	measu		Mother.	Foctus.		measu		Mother.	Foetus.	beat
		Engl. ft.	Engl.ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
/ 1	40	$\frac{77}{86}$	$rac{4'0''}{7'0''}$	M F	$\frac{12}{1}$	40	81 80	${6'0''\over13'6''}$	F F	$\frac{18}{19}$	40	$\frac{81}{83}$	${12'0''\over9'0''}$	M M
	,, 	86	8' 0"	M	13/1	,,	90	6'0"	M		,,	71	6′ 0″	M
	" "	90	6' 0"	Μ	,,	" "	90	7'0"	F	,, ,,	" "	85	14'0''	\mathbf{F}
	,,	81	6'0"	F	,,	,,	86	11' 0"	F	,,	,,	80	5'0"	F
,,	,,	72	2'0''	M	,,	,,	82	8'0"	\mathbf{F}	,,	,,	82	11'0″	F
7/1	,,	84 80	$\frac{10'0''}{7'0''}$	M M	14/	,,	87	10'0'' 14'0''	F M	,,	,,	$\begin{array}{c c} 82\\77\end{array}$	4'0'' 6'0''	M F
	**	89	4'0"	\mathbf{F}	/1	"	$\begin{array}{c c} 84\\ 86 \end{array}$	3'0"	M	,,	"	83	12'0''	F
	,,	80	8'0"	Ē	**	"	91	15'0''	F	,,	"	81	10'0"	$\mathbf{\hat{F}}$
	,, ,,	80	10'0"	$\bar{\mathbf{F}}$,, ,,	" "	$9\hat{2}$	8'0″	Μ	,, ,,	" "	82	8' 0"	F
	,,	71	5'0''	М	,,	,,	82	8' 0"	M		,,	86	10'0"	M
	••	86	$\frac{2'0''}{2'0''}$	M	,,	,,	88	5'0"	M	²⁰ /1	••	85	14'0"	F
8/1	,,	88	7' 0'' 7' 0''	$\begin{array}{c c} M \\ F \end{array}$,,	,,	78	9'0'' 5'2''	M	••	,,	86	14'0'' 10'0''	\mathbf{F} M
	,,		10'0"	M	1 ³ /1	,,	$\begin{array}{c c} 76\\ 75\end{array}$	$\frac{5 2}{6' 0''}$	F M	,,	;,	79 83	10'0''	M
	"	81	10'0''	M		,,	88	$\frac{60}{4'0''}$	M	21/1	·•	85	$\frac{11}{9'0''}$	M
	,, ,,	82	7'0"	F	" "	,, ,,	81	14'0"	F	,,	,, ,,	91	9' 0"	F
	,,	87	8' 0"	F	,	,,	86	5'0''	F		,,	82	6' 0''	F
	,,	88	12'0''	F	,,	,,	95	3'0''	M	$\frac{22}{1}$,,	87	8' 0"	F
,,	••	79	4'0''	M	,,	,,		8'0"	M	,,	,,	89	11'0''	M
,,	••	88	$\begin{vmatrix} 13' 0'' \\ 6' 0'' \end{vmatrix}$	F F	,,	,,	83	$\begin{vmatrix} 7' 0'' \\ 10' 0'' \end{vmatrix}$	M M	,,	,,	84	5'0'' 16'0''	F M
	,,	$\begin{array}{c} 83 \\ 82 \end{array}$	7'0''	F	,.	,,	82 89	10'0''	M	,,	••	88 90	$\frac{10}{20'0''}$	F
	"	84	3'0''	M	,,	,,	82	5'0''	M	,,	••	90	15'0''	M
"	" "	84	4'0"	M	,,	,, ,,	88	7'9"	F	,, ,,	•• ••	91	6' 6"	\mathbf{F}
9/1		78	∫ 9′0″	\mathbf{F}	16/1	,,	83	5' 0"	\mathbf{F}	,,	,,	88	14'0"	F
/1	,,	1	$\left \left(\begin{array}{c} 9' \\ 9' \\ 0'' \\ 0$	M	,,	,,	88	3'0''	F		,,	84	19'2"	M
,,	,,	79	6'0'' 4'0''	M	,,	•••	$\frac{81}{79}$	12'0''	F	2 ³ /1	,,	89	10' 0'' 11' 0''	\mathbf{F}
"	,,	75 72	8'0"	F M	••	,,	82	6' 0'' 3' 0''	M F	,,	,,	84 79	7' 0"	\mathbf{F}
,,	••	85	12.0"	M	,,	,,	83	8'0"	Î	,,	,,	87	6'0"	F
,, ,,	,, ,,	81	6' 0"	F	,, ,,	,, ,,	91	7' 0"	Μ	" "	,, ,,	88	13' 0"	M
,,	,,	79	4'0"	\mathbf{F}	,,	,,	86	10'0''	M	,,	,,	91	6' 0"	M
	,,	82	8'5"	F	, ,,	,,	85	11'0"	F	,,	,,	84	14'0"	F
10/1	••			M	17/1	,,	88	15'2''	M M	,,	,,	83	8'0'' 15'0''	M
,,	"	89 88	5'0''	M M		"	83 80	$\begin{vmatrix} 8' 0'' \\ 7' 0'' \end{vmatrix}$	M	²⁴ / ₁	"	84	10'0"	M F
"	" "	75	9'0"	M	,,	,,	81	2'0''	F	/1	"	84	19'0"	M
,,	,,	84	10'0"	F	" "	" "	85	8'0"	Μ	" "	,, ,,	77	6' 0"	\mathbf{F}
,,	,,	80	6'0"	F	,,	,,	74	6'0"	M	,,	,,	90	6' 0"	\mathbf{F}
,,	,,	82	12'0''		,,	,,	83	13'0"	M	,,	,,	92	$ \frac{14'0''}{7'0''} $	F
,,	,,	$\begin{vmatrix} 85\\80 \end{vmatrix}$	7' 10' 7' 6''	" M M	,,	"	83 84		F F	,,	,,	83	13' 0"	F M
11/1	,,	84	14'0"	F	,,	,,	86	8'7"	F	,,	"	80	10'0"	M
, 1	;;	73	7' 0"	F	·,	,,	81	10' 0"	M	25/1	,, 	87	9' 0"	M
,,	,,	74	-5'0''	M	,,	,, ,,	88	9' 10'		,,,	,,	84	10'0"	M
,,	,,	70	14'0''	F			83	14'0"	M	,,	,,	88	5'0"	F
,,	,,	87	7'0"	F	18/1	,,	81	4'0''	F	,,	,,	82	9'0''	F
,,	"	84 81	4'0'' 6'0''	M F	,,	,,	84 87	3' 0'' 10' 0''	M F	,,	"	87	12' 0'' 7' 0''	$ \mathbf{F} $
,,	"	90	12'0''	M	"	**	89	$\frac{10}{4'0''}$	M	,,	,,	86	5'6"	\mathbf{F}
"	,, 	82	5'0''	F	,,	,, 	83	9'0"	F	"	,, 	86	15'0"	F
,,	,, ,,	87	6' 0"	M	" "	,, ,,	86	13'0"	F	,, ,,	,, ,,	81	17'0"	M
	,,	81	4'7"	F	,,	,,	79	7'0"	F	ы ,,	,,	88	8'0"	F
12/1	,,	95	18'0''	F	,,	,,	89	9'0''	M	, ,,	,,	88	5'0''	M
"	,,	85	10'0'' 8'0''	M F	,,	,,	90 82	14'0'' 12'0''	F M	,,	"	87 79	$ \begin{array}{c c} 10' 0'' \\ 12' 0'' \end{array} $	F F
,,	"	1 00	, 00	1 1	"	"	1 04	114 0	1 m	,,	,,	1 10	0 111	1.10

 $Table \ No. \ 9. \\ --Blue \ whale \ foetuses \ (cont.).$

Table No.	9	Blue-whale	foetuses	(cont.).

Date when	Lei	ngth.	Sex.	Da wh		Le	ngth.	Sex.	Dat whe		Ler	ngth.	Sex.
measured.	Mother.	Foetus.		meas	ared.	Mother.	Foetus.		measu	ired.	Mother.	Foetus.	
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	and a second second	- 1.000		Engl. ft.	Engl.ft.	
²⁶ / ₁ 40	85	12'0''	M	30/1	40	86	10'0"	M	$\frac{4}{2}$	40	79	10'0''	F
» »	86 86	18'0" 10'0"	$ \begin{array}{c} \mathbf{F} \\ \mathbf{M} \end{array} $,,	,,	$\frac{85}{83}$	12'0'' 9'0''	M M	,,	,,	$\begin{array}{c} 85\\82\end{array}$	5'0'' 14'0''	$ \begin{array}{c} M \\ F \end{array} $
,, ,,	91	10'0''	M	,,	,,	86 86	17'0''	\mathbf{F}	² / ₂	••	84 84	10'0''	F
,, ,,	87	15'0''	F	"	,,	80	14'0"	F		,,	91	7'0"	F
·· ·· ·· ··	89	8'0"	$ \mathbf{\hat{F}} $	"	" "	85	13'0 "	M	" "	" "	83	16' 0"	M
·· · ·	85	5'0"	M	31/1	,,	85	13'0''	Μ	,,	,,	87	9' 0"	Μ
,, ,,	94	14'0"	Μ	,,	,,	89	16'0''	M	,,	,,	88	4'0''	\mathbf{F}
,, ,,	85	16'0"	F	,,	,,	70	9'0"	M	27	,,		13'0''	F
,, ,,	91	10'0''	M	?'	••	80	7'0''	F	6/2	,,	87	7'0''	\mathbf{F} \mathbf{F}
» »	82	6'0''	F	"/2	,,	82	$ \begin{array}{c} 14'0'' \\ 7'0'' \end{array} $	M	,,	,,	79 83	$\begin{array}{c c} 7'0'' \\ 16'0'' \end{array}$	F
·· ··	91 87	$ \begin{array}{c} 14' 0'' \\ 5' 0'' \end{array} $	M M	,,	"	87 89	19'0"	M M	,,	,,	85	10'0''	M
,, ,,	89	13'0"	F	,,	••	89 77	19'0''	M	"	,,	91	8'0"	F
** **	92	8'0"	F	"	"	87	12' 0"	F	,,	"	77	9'0"	$\mathbf{\hat{F}}$
** **	77	7' 8"	$ \hat{\mathbf{F}} $	"	"	90	4'0"	Ē	"	,, ,,	81	7' 0"	F
$\frac{27}{1}$,	88	8'0"	Μ	>> >>	" "	85	8'0"	F	" "	,,	89	10'0"	M
,, ,,	78	9' 0"	M	,,	,,	88	16' 0"	M	,,	,,	85	17'0''	M
,, ,,	88	5'0''	M	,,	,,	78	10'0''	F	,,	••	83	17'0"	M
» » »,	82	12'0''		,,	,,	80	9'0''	F	• •	,,	83	$\frac{8'0''}{5'4''}$	\mathbf{F} M
» »	85	3'0''	M	,,	,,	83	11'0" 16'4"	F	,,	,,	84	5' 4'' 14' 6''	M
,, ,,	90 81	$\begin{vmatrix} 9'0'' \\ 12'0'' \end{vmatrix}$	M M	,,	**	90 80		M	?'/2	"	77 83	14'0''	M
,, ,,	83	12'0''	F	$\frac{?'_{2}}{2}$,,	81	8'0"	F		"	82	9'0"	M
»» »»	82	8'0"	M		"	88	5'0"	F	,,	,,	90	5'0"	M
** **	81	7' 0"	F	,, ,,	" "	84	15' 0"	M	" "	" "	86	11'0"	Μ
,, ,, ,, ,,	85	13'0''	M	,,	,,	85	13'0''	\mathbf{F}	,,	,,	86	13'0"	\mathbf{F}
	77	8'4''	\mathbf{F}	,,	,,	85	7'0"	M	,,	,,	90	5'0"	\mathbf{F}
²⁸ / ₁ ,,	88	7'0"	M	·,,	,,	86	12'0''	F	,,	,,	81	14'0''	F
,, ,,		16'0''	M	••	,,	82	3'0''	F	,,	,,	83	9'0''	M M
** **	82	$ \begin{array}{c} 10' 0'' \\ 5' 0'' \end{array} $	M	,,	,,	$ 85 \\ 82 $	9'0'' 11'0''	M	,,	,,	83 80	$\begin{vmatrix} 15' 0'' \\ 9' 0'' \end{vmatrix}$	M
,, ,,	90 85	8'0"	M M	,,	,,	90	6'0''	M M	,,	,,	83	8'0"	M
»» »»	91	10'0''	M	,,	,,	81	13'0"	M	,,	"	87	8'0"	F
** **	81	12'0''	M	,,	»,	83	9' 0"	F	,, ,,	,, 	83	16'0"	F
²⁹ / ₁ ,,	85	9'6''	Μ	" "	" "	85	8'4"	M	,,	" "	87	9'0"	M
·· · ·	85	9' 0"	F	,,	,,	74	12'0"	F	,,	,,	87	10'6"	\mathbf{M}
·· ··	85	8' 6''	\mathbf{F}		••	81	14'0"	M	,,	,,	85	12'2''	F
,, ,,	85	8'0"	F	3/2	,,	89	14'0"	M	,,	,,	82	14'4"	M F
,, ,,	88	7'0'' 15'0''	M	,,	,,	81	11'0'' 7'0''	M		,,	80 89	10'0'' 13'0''	F
,, ,,	$\begin{array}{c} 88\\87\end{array}$	15 0 14'0''	$ M \\ F$	"	••	87 89	14'0"	M M	⁸ /2	,,	91	$\frac{13}{9'0''}$	F
** **	81	14'0''	F	,,	,,	78	$\frac{14}{3'0''}$	M	,,	**	84	18'0"	$\mathbf{\tilde{F}}$
·· ··	88	13'0''	M	,, ,,	,, ,,	76	9'0"	F	") ₂	,, ,,	81	12'0"	\mathbf{F}
,, ,, ,, ,,	82	15'0''	F	,,	,, ,,	80	11'0"	F	,,	,, ,,	85	8'0"	\mathbf{F}
·· · ·	87	17'0''	M	,,	,,	76	8'0"	\mathbf{F}	,,	,,	80	10'0"	M
,, ,,	85	14'0"	M	,,	,,	76	5'0"	M	"	,,	80	11'0''	M
,, ,,	86	7'0''	F	,,	,,	76	8'0"	F	,,	,,	82	$\begin{array}{c c} 7' 0'' \\ 9' 0'' \end{array}$	\mathbf{F} M
** **		7'0'' 3'0''	M	,,	,,	77	9' 6" 9' 10"	M	**	,,	79 84	9'0" 9'0"	F
³⁰ / ₁ ,,	88 86	13'0"	M M	4/2	,,	86 87	9 10 8' 0"	M M	,,	,,	84	12'0''	$\mathbf{\tilde{F}}$
	83	13'0''	M	11	"	90	12'0''	F	,,	,,	87	13'0''	M
·· ··	88	5'0"	M	**	,, 	84	6'0"	M	,, 	,, 	77	9' 0"	\mathbf{F}
""""" """"	87	9'0"	M	" "	" "	86	12'0''	F	,, ,,	,, ,,	86	4'6"	Μ
·· · ·	78	7' 0"	Μ	,,	;,	90	12'0"	M	,,	,,	83	9'0"	F
** **	89	5'0"	F	,,	,,	84	10'0"	F		,,	82	6'0"	F
** **	81	13'0''	F	,,	,,	80	8'0"	M	10/2	,,	87	$ \begin{array}{c} 13'0'' \\ 7'0'' \end{array} $	M M
" "	82	9'0"	$ \mathbf{F} $,,	"	77	12'0"	l M	,,	,,	82	1 1 0	i mr

Date when	Lei	ngth.	Sex.	Date when		Lei	ngth.	Sex.	Dat whe		Ler	ngth.	Sex.
measured.	Mother.	Foetus.	Joca.	measure	d.	Mother.	Foetus.	jeen.	measu		Mother.	Foetus.	
	Engl. ft.	Engl.ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
10 $_{2}$ 40	89	7'0''	М	$\frac{16}{2}$ 4	0	-87	16'0''	М	$^{21}'_{, 2}$	40	77	11'0''	\mathbf{F}
·· ··	91	13'0''	F		,,	81	18' 0"	F	.,	,,	$\frac{85}{22}$	9'0''	F
·· ,,	76	12'0'' = 10'0''	M F	., ,	,,	87	13'0''	F M	22/3	,,	89 87	7'0'' 18'0''	\mathbf{F} \mathbf{F}
·· ·,		10'0''	r M	,, ,	,,	$ 81 \\ 76 $	$rac{15'0''}{4'0''}$	M M	i з	;,	$\frac{85}{86}$	18.0 17'0''	r M
•• ••	86	$10^{-1}0^{-1}0^{-1}$	F		,,	85	16'0''	F	,,	,,	87	170'' 12'0''	M
$\frac{1}{1}$, ",	82	10'0''	F		,,	89	$\frac{10}{4'}$ 0"	M	,,	,,	81	10'0"	M
···/2 ;;	81	16'0''	M		,, ,,	92	21'0''	F	,, ,,	,, ,,	85	15'0''	\mathbf{F}
·· ··	85	12'0''	\mathbf{F}		,,	82	15'0''	M	,,	,,	79	2' 0''	M
	86	18'0''	M		,	84	16'0''	Μ	••	,,	86	25'0''	\mathbf{F}
12/2 ;;	84	13'0''	F		••	75	9'10"	F	,,	,,	81	6'0''	F
12/2 **	80	7'0''	F		,,	78	15'0''	M	,,	,,	86	15'0"	M
., .,	87 86	5'0'' = 13'0''	F M		,,	$\begin{array}{c c} 93 \\ 78 \end{array}$	7′ 0″ 10′ 0″	M M	,,	,,	$\begin{array}{c} 81 \\ 84 \end{array}$	9'0'' 13'0''	F M
., .,	73	13'0''	M	,, ;	,,	89	10.0 17'0''	F III	,,	,,	$\frac{84}{85}$	15 U 8' 0"	F
., .,	88	13'0"	M		••	79	-6′0″	F	$\frac{23}{2}$;,	91	12'0''	F
·· ··	80	18'0"	F		;, ,,	78	10'0"	M	,,	;; ;;	89	10' 0"	F
11. 11. ,,	-93	11'0''	F		,, ,,	- 89	17'0''	F	;,	,,	84	2010 "	M
	77	8'0″	M		••	79	6' 0 "	\mathbf{F}		,,	86	14'0''	\mathbf{F}
	57	13'0"	F		,,	80	14'0''	M	24/2	,,	84	9'0"	M
·· ,·	78	5'0''	F	,, ,	· ·	80	12'0''	M	,,	,,	86	12'0''	M
., ,,	75	11'0'' 0''	M	,, ,	,,	84	18'0''	F	,,	,,	77	8'0"	M
,, ,,	83 86		\mathbf{F}		,,		$\frac{12'0''}{2'0''}$	\mathbf{F}	,,	••	89 91	$19^{\circ}0''$ $12^{\circ}0''$	\mathbf{M}
., ,,	86	15' 0"	F		,,	86	5'8''	F	,,	"	80	12'0''	F
** **	84	7' 0"	F	18/	**	83	12'0''	Ē	,,	,,	81	11'0''	F
·· ·· ··	80	4' 0"	$\mathbf{\tilde{F}}$,,	,, ,,	88	5' 0"	F	" "	" "	77	9'0"	\mathbf{F}
	77	17' 4″	\mathbf{F}	ii .	,, ,,	79	12'0''	M	,,	,,	87	5'0''	\mathbf{F}
$\frac{14}{2}$	79	12'0''	\mathbf{F}		,,	82	14'0''	F	,,	,,	82	20' 0"	\mathbf{F}
·· ··	88	10'0''	F	,, ,	,,	89	18'0"	F	,,	,,	88	9′0″	F
·· ··	89	9'0''	M	,, ,	,,	80	9'0''	M	,,	,,	83	6'0''	F
•• •;	$\frac{83}{85}$	$\frac{4'0''}{14'0''}$	$ \mathbf{F} $ $ \mathbf{F} $	1 ** •	,,	$\frac{83}{88}$	20'0'' 21'0''	F M	25/2	,,	86 90	13'0'' 14'0''	M F
·· ··	77	$\frac{14}{7'0''}$	$ \mathbf{F} $,,	91	12'0''	F		,,	85	14'0' 10'0''	M
·· ··	80	12'0''	M		••	91	14'0''	F	**	,,	88	$10^{\circ}0''$	F
·· ·· ·· ··	91	9' 0"	F		,, ,,	79	12'11"	F	,, ,,	,, 	86	11'0"	M
,, ,,	78	8'0''	F	19/	,,	76	11' 0″	M	,,	,, ,,	85	9.0″	\mathbf{F}
,, ,,	83	11'0''	M		,,	80	11'0"	Μ	,,	,,	80	16'6''	Μ
	85	16' 3"	F		,,	84	10'0"	F		,,	87	18'0"	F
¹⁵ / ₂ ,,	81	10' 0'' - 9' 0''	F F	,,	,,	86	23'0''	M	26/2	,,		9'0'' 14'0''	M
,, ,,	75 88	11'0"	M	20/	"	76 82	12'0" 9'0"	M F	••	,,	87 82	14 0 10'0''	M M
·· ··	88	3'0''	F		"	81	7'0''	F	,,	,,	86	10'0''	F
******	87	10' 0"	M	11	"	87	16'0"	F	27/2	,,	83	14'0"	M
·· · ·	80	8'0"	M	li	,, ,,	86	18'0"	M	28/2	" "	90	10'0"	M
., .,	79	10'0"	Μ		,, ,,	88	21'0''	Μ	,,	,, ,,	82	23' 0"	\mathbf{F}
·· ··	84	13'6''	Μ		"	82	18'0''	\mathbf{F}	,,	,,	87	6'0"	\mathbf{F}
	83	14'0''	M	3	••	83	13'0"	F		,,	90	14'0"	M
$\frac{13}{2}$, "	80	5'0''	M	,,	,,	79	14'0''	F	²⁹ / ₂	••	89	$\begin{bmatrix} 20'0'' \\ 17'0'' \end{bmatrix}$	F
	$86 \\ 87$	11'0'' 10'0''	F M		,,	87	16'0'' 16'0''	M F	$\frac{1}{3}$,,	84 88	15'0'' 10'0''	$ \begin{array}{c} M \\ F \end{array} $
	85	$\frac{100}{7'0''}$	F	· 21/	••	78	10'0''	M	;,	,,	84	10'0''	F
		f 8'0"	M	il.	"	84	16'0"	F	2/3	••	84	$ \frac{12}{4'0''} $	F
	86	1 9' 0"	F	1	,,	86	3'0"	F		,, 	87	6'0"	M
	82	9'0"	F		,, ,,	80	9'0"	Μ	,,	,,	79	[10'0"	\mathbf{F}
	82	11'0"	F		,,	84	13' 0"	F	"			10'0"	\mathbf{F}
	85	16'0''	M		"	82	11'0"	F	37	,,	84	7'0"	F
	87	11′ 0″	M	**	,,	91	15' 0"	\mathbf{F}	· · ·	,,	79	8'0"	$ \mathbf{F} $

Table No. 9.—Blue-whale foetuses (cont.).

Table No. 9.-Blue-whale foetuses (cont.).

Date when	Lei	ngth.	Sex.	Dat whe		Lei	ngth.	Sex.	Date when	Ler	ngth.	Sex.
measured.	Mother.	Foetus.	SCA.	measu		Mother.	Foetus.	Sex.	measured.	Mother.	Foetus.	bex.
3/3 40	Engl. ft. 82 81 74	Engl. ft. 9' 0" 14' 0" 14' 0"	F F F	$\frac{5}{3}$	40	Engl. ft. 82 83 89	Engl. ft. 11' 0" 18' 0" 13' 0"	M M F	$\frac{10}{3}$ 40	Engl. ft. 76 81 81	Engl.ft. 14'0" 16'0" 14'0"	\mathbf{F}
$\frac{1}{4}/\frac{3}{3}$ $\frac{1}{2}$	$ \begin{array}{c c} 81 \\ 89 \\ 89 \\ 86 \\ 84 \\ \end{array} $	16' 0" 8' 0" 4' 0" 10' 0" 19' 0"	F F M M M	7/3 8/3	,, ,, ,,	83 87 83 90 87	$\begin{array}{c} 14'0''\\ 6'0''\\ 14'0''\\ 21'0''\\ 17'0''\end{array}$	F M F F M	>> >> >> >> >> >> >> >> 14/	83 88 88 93 87	$ \begin{array}{c} 10' 0'' \\ 15' 0'' \\ 14' 0'' \\ 24' 0'' \\ 14' 0'' \end{array} $	
5/3 ,, ,, ,,	80 84 85 al 925	12' 0" 16' 0" 14' 0" blue-wh	M F F ale f			83 90 83	16' 0" 9' 0" 16' 0"	F M M	, ⁷³ ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	82	13'0"	F

2. Fin-whale foetuses

measured in the Southern Seas in the season 1939/40.

Dat		Le	ngth.	G	Da		Len	gth.	G	Da		Ler	igth.	Sex.
measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
⁶ /11	39	67	2' 0''	F	$\frac{12}{12}$	39	73	7'0″	F	15/12	39	70	4'0''	м
$\frac{12}{11}$,,	68	2'6''	M	,,	,,	59	3'0''	F	,,	,,	74	1'0"	Μ
$\frac{13}{11}$,,	71	2' 9''	\mathbf{F}	,,	,,	72	1'0''	\mathbf{F}	,,	,,	76	2'0''	M
,,	,,	$68\frac{1}{2}$	4' 0″	M	,,	,,	64	2'0''	Μ	,,	,,	70	3' 0"	\mathbf{F}
	,,	66	1'2''	$ \mathbf{F} $	[,,	70	5'4''	F	,,	,,	75	1'6''	M
²¹ /11	,,	$72rac{1}{2}$	3' 0"	F	$\frac{13}{12}$,,	75	4'0''	M	16/12	,,	71	4'6''	\mathbf{F}
22/	,,	70^{-1}	1'0"	M	,,	,,	73	4' 0"	\mathbf{F}	,,	,,	73	7' 0"	\mathbf{F}
23/11	,,	68	3'0"	\mathbf{F}	,,	,,	72	5'0''	M	,,	,,	74	6'0"	M
1/19	,,	71	4'6''	M	,,	,,	69	1'6''	M	,,	,,	66	3' 0"	\mathbf{F}
² /12	,,	$71\frac{1}{2}$	3' 6"	\mathbf{F}	,,	,,	75	2'0''	M	,,	,,	72	1'6''	Μ
8/12	,,	74^{-}	6' 0"	M	,,	,,	75	3' 0"	M	,,	,,	75	3'0''	\mathbf{F}
	,,	75	5'0"	M	,,	,,	73	4'0''	M	,,	,,	75	6' 0"	\mathbf{F}
⁹ /12	,,	73	1'0"	M	,,	,,	75	5'0''	\mathbf{F}	,,	,,	77	8'0"	М
,,	,,	56	2'9"	\mathbf{F}	,,	,,	70	3' 0"	F	,,	,,	74	5'0''	\mathbf{F}
,,	,,	71	4'2''	\mathbf{F}	,,	,,	70	4'0''	M	17?	,,	69	5'0''	\mathbf{F}
10/12	,,	74	5' 0"	M	,,	,,	66	3' 3''	\mathbf{F}	17/12	,,	72	2'0''	Μ
,,	,,	72	3'0"	M	.,	,,	73	8'10"	F	,,	,,	71	5'0''	М
,,	,,	72	2'0"	\mathbf{F}	$\frac{14}{12}$,,	74	6'0"	\mathbf{F}	,,	,,	73	6' 0"	\mathbf{F}
,,	,,	71	5'6''	M	,,	,,	72	2'0''	M	,,	,,	70	3' 0"	\mathbf{F}
11/12	,,	71	4'0''	\mathbf{F}	,,	,,	67	4'0''	M			64	∫ 2′0″	Μ
,,	,,	75	6'0"	F	,,	,,	75	4'0''	M	"	,,		2'0''	Μ
,,	,,	74	5' 0"	M	,,	,,	73	2'0''	M	,,	,,	76	2'0''	M
,,	,,	73	5'0"	M	,,	,,	71	4'0''	M	,,	,,	75	2'0''	F
,,	,,	72	4'6''	\mathbf{F}	,,	,,	74	5'0''	M	,,	,,	63	3' 0"	M
,,	,,	73	4'6''	\mathbf{F}	,,	,,	70	3'0"	\mathbf{F}	,,	,,	76	8'0"	Μ
•,	,,	$77\frac{1}{2}$	4'6''	Μ	,,	,,	68	2'0''	\mathbf{F}	,,	,,	74	5'0''	\mathbf{F}
$\frac{12}{12}$,,	73^{-}	5'0"	M	,,	,,	71	5'0''	\mathbf{F}	,,	,,	74	7'0"	Μ
,,	,,	71	2'0"	F	,,	,,	69	1'0"	M	,,	,,	72	3' 0"	\mathbf{F}
,,	,,	72	3' 0"	M	,,	,,	73	4'0''	\mathbf{F}	,,	,,	73	3'0"	\mathbf{F}
,,	,,	73	8'0"	\mathbf{F}	,,	,,	71	8' 0"	M	,,	,,	71	10'0"	\mathbf{F}
,,	,,	73	1'0"	F	1	,,	72	5'8''	\mathbf{F}	,,	·•	72	5'0''	\mathbf{F}
,,	,,	75	6' 0"	M	15/12	,,	74	8' 0"	\mathbf{F}	$\frac{18}{12}$,,	66	5'0"	F
,,	,,	75	7'0"	M	,,	,,	79	2'0''	\mathbf{F}	,,	,,	75	8'0"	Μ
**	,,	65	4'0''	\mathbf{F}	, ,	,,	65	5'0''	Μ	,,	,,	69	6'0"	\mathbf{F}

2

Date	Ler	ngth.	~	Date	Ler	ngth.	G	Date	Len	gth.	s
when neasured.	Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	a
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
¹⁸ / ₁₂ 39	71	6′ 0″	F	²¹ / ₁₂ 39	65	3' 0"	F	²⁵ / ₁₂ 39	73	8' 0"	D
	73	3'0"	M		69	3'0"	F		66	3' 0"	ĺĨ
,, ,,	66	3' 0"	M	,, ,,	71	4'0"	F	,, ,,	70	2' 0"	1
,, ,,	74	2'6''	M	,, ,,	67	$\frac{1}{4'0''}$	F	,, ,,		f9'0 "	
,, ,,	71	$\frac{2}{3'0''}$	M	,, ,,	72	$\frac{1}{6'} \frac{0}{0''}$	Ē	,, ,,	76	19'0"	j
,, ,,	75^{11}	10'0"	F	·· ··	72	3' 0"	M		73	7' 0"]
,, ,,	70	$\frac{10}{5'0''}$	M	·· ··	60	3' 0"	F	,, ,,	74	2'0''	1
,, ,,	69	5'0"	M	,, ,,	69	7'0"	$ \mathbf{\hat{F}} $,, ,,	76	10.0″	
** **	70	5'0''	M	,, ,,	73	3' 0"	M	,, ,,	68	3' 0"	
,, ,,	72	5'0''	M	·· ··	71	6'0"	F	,, ,,	67	1'6″	
,, ,,	$\overline{73}$	6'0"	F	,, ,,	69	5' 0"	M	,, ,,	67	2' 8"	
,, ,,	66	1.0″	F	22/12 ,,	69	5' 0"	M	,, ,,	72	8' 0"	
·· ··	65	$\frac{1}{6'0''}$	M		66	4' 0"	F	,, ,,	68	5' 0"	1
,, ,,	68	5' 0"	M	,, ,,	73	8'0"	M	26/12 ,, ,,	73	7'0″]
,, ,,	69	4' 6"	F	** **	70	4' 0"	F	1	74	2'0"]]
** **	71	7'0"	M	** **	59	4'0"	M	·· ·· ·· ··	74	2' 6''	
,, ,,	70	4′0″	F	** **	70	7'0"	F	·, ·, ·,	62	5'0''	1]
** **	65	4'0"	F	,, ,,	69	2'0''	M	,, ,,	68	7' 0"]
19/	75	4'0''	F	,, ,,	67	2'0''	F	,, ,,	76	8' 0"]]
12 ,	71	2'0''	M	,, ,,	71	2'0''	M	,, ,,	69	5'0"]]
,, ,,	73	4'0''	F	*** **	75	10' 0"	M	,, ,,	68	4'0"]]
,, ,,	$\overline{70}$	2'0''	Μ	** **	69	4 0″	F	,, ,,	65	3' 0"]]
,, ,,	74	-5'0''	F	** **	66	2'10"	M	,, ,,	78	5'0'']
,, ,,	76	6.0"	M	$\frac{23}{12}$, "	67	1'6″	M	,, ,,	69	4'0"]]
·· ··	73	3'0''	M	,, ,,	74	5'0"	M	,, ,, ,,	68	2.0"]]
,, ,, ,, ,,	73	5'0''	Μ	,, ,,	77	5'0''	M	,, ,,	63	3 ′ 0″]]
·· ··	71	4'0''	\mathbf{F}	,, ,,	65	-7'0''	F	,, ,,	75	2'0"]]
,, ,,	66	1'0''	M	,, ,,	74	-5'0''	M		(9	5'0"]]
·· ··	68	7'0''	M	,, ,,	71	4'0"	$ \mathbf{F} $	$27/_{12}$,,	74	6' 0"	1
,, ,,	64	3' 0''	\mathbf{F}	,, ,,	78	4' 0"	\mathbf{F}	,, ,,	75	3' 0"]]
,, ,,	72	2'0''	M	,, ,,	73	5'0''	M	,, ,,	68	6' 0"	
	68	4'0''	F	,, ,,	77	6' 0"	M	,, ,,	72	4'0''	1
$\frac{20}{12}, \frac{12}{12}, \frac{12}{12}$	75	-6'0''	Μ	,, ,,	73	3' 0"	M	,, ,,	74	9' 0"	1
,, ,,	74	7′0″	Μ	,, ,,	73	4'0''	M	,, ,,	77	6'0"]]
·· ··	63	-4'0''	\mathbf{F}	,, ,,	75	3'0''	M	,, ,,	70	5 0"	
,, ,,	$\overline{75}$	4'0''	M	,, ,,	67	4' 0"	M	,, ,,	63	4'0"]]
,, ,,	65	3' 0''	M	,, ,,	76	5'0''	\mathbf{F}	·, ·,	73	7'0"	
,, ,,	64	4'0"	Μ	,, ,,	71	5'0''	М	$\frac{28}{12}$, ,,	70	5'0''	
,, ,,	64	3' 0''	F	,, ,,	65	4 ′0″	F	,, ,,	75	9'0"	
,, ,,	68	$\frac{4'0''}{5'0''}$	F	,, ,,		5'0''	F	,, ,,	76	9'0"]]
, , ,,	66	5'0''	F	,, ,,	69	6'0''	M	,, ,,		$\begin{array}{c} 9'0'' \\ 5'0'' \end{array}$	
•• ••	77	7'0"	M	·· ··	70	6'0''	M	,, ,,		5'0'' 8'0''	
,, ,,	73	4'0''	M	,, ,,	67	1'0''	F	,, ,,	76	8 0" 8'0"	
,, ,,	70	8'0"	M	,, ,,	70	5'0''	M	,, ,,	73	8 0 5' 0"	- 1
,, ,,	67	3' 6"	M	$^{24}/_{12}$,,		7'0''	F	,, ,,	70	1	1.
.,, ,,	68	5'0''	M	·› ·›		6'0''	M	,, ,,		$\begin{vmatrix} 5' 0'' \\ 4' 0'' \end{vmatrix}$	1:
$^{1}_{12}$		7'0''	M	»» » »	67	5'0''		,, ,,	74	$\begin{array}{c c} 4 & 0 \\ 5' & 0'' \end{array}$	
", "		5'0''	M	,, ,,	67	4'0''	M	,, ,,	74 74	$\begin{array}{c c} 5 & 0 \\ 7' & 0'' \end{array}$	
", "	67	2'0''	M	,, ,,		6'0''	M	,, ,,	1	5'0"	
,, ,,	72	3'0''	M	,, ,,	69	$\begin{array}{c c} 2'0''\\ 2'0'' \end{array}$	M	,, ,,	$\begin{vmatrix} 65 \\ 70 \end{vmatrix}$	$\frac{50}{4'0''}$	
,, ,,		2'0''	M	,, ,,	72		M	,, ,,		$\frac{40}{7'0''}$	
,, ,,	$ \frac{69}{77}$	1'0''	F	,, ,,	75	7'0''	F	,, ,,	$72 \\ 77$	3' 6"	
·, ·,		4'0''	M	,, ,,	$\begin{vmatrix} 69 \\ 79 \end{vmatrix}$	4'0''	F	,, ,,	77	$\frac{3}{7'0''}$	-
,, ,,	67	6'0''	M	,, ,, ,,		$\frac{2'0''}{2'0''}$	F	,, ,,	73	8'0"	
,, ,,		8'0''	F	$\frac{25}{12}$,	61	3' 0''	M	,, ,,	71	5'0''	
,, ,,	67	1' 6''	M	,, ,,		$\frac{3'0''}{9'0''}$	M	,, ,,	69 70	8'8"	-
,, ,,		4'0"	M	,, ,,	68	$\frac{2}{2'0''}$	M	,, ,,	70 69	5'0"	-
· · ··	72	5'0"	M	,, ,,	75	2'0"	\mathbf{F}	,, ,,	1 00	1 0 0	1

Table No.9.-Fin-whale foetuses (cont.)

 $Table \ No. \ 9. - Fin-whale \ foetuses \ (\ cont.).$

Date when	Lei	ngth.	Sex.	Date	Lei	ngth.	Com	Da		Ler	ngth.	Sex.
measured.	Mother.	Foetus.	Sex.	when measured	Mother.	Foetus.	Sex.	who measu		Mother.	Foetus.	bex.
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.				Engl. ft.	Engl.ft.	
$^{28}/_{12}$ 39	66	5'3''	M	³¹ / ₁₂ 39	77	8' 0"	F	3/1	40	72	8' 0"	M
²⁹ /12 ,,	73	4'0''	\mathbf{F}		72	1'6"	$ \mathbf{F} $,,	,,	77	6' 0"	M
,, ,,	73	4' 0''	M	ı", 40	69	5'0"	\mathbf{F}	,,	,,	75	8'0"	\mathbf{F}
·, ·,	72	4'0''	$ \mathbf{F} $,, ,,	65	6'0"	F	,,	,,	65	3'0''	Μ
,, ,,	71	0′ 9″	M	·, ·,	72	1'6''	M	,,	,,	70	8' 0"	F
·· ··	72	2' 0''	\mathbf{F}	,, ,,	79	9' 0"	M	,,	,,	68	9' 0"	Μ
·· ··	76	6' 0"	\mathbf{F}	,, ,,	70	11'0"	F	,,	,,	64	2'0''	M
,, ,,	76	8′ 0″	F	·,, ,,	69	9'0"	M	,,	,,	74	7'0"	M
·· ··	69 71	5'0"	M		72	$\begin{cases} 7' 0'' \\ 7' 0'' \\ 7' 0'' \end{cases}$	F	,,	,,	74	4'0''	F
» »	$71 \\ 72$	4'0''	M	,, ,,		ξ7' 0 "	F	,,	,,	77	8'0" 8'0"	F
,, ,,	73	$\frac{1}{6'}$ 6''	F	,, ,,	68 79	8'0"	F	,,	,,	68	$rac{2'0''}{3'0''}$	M
** **	72	0 0 7' 0″	F	,, ,,	73	$\frac{8'0''}{5'0''}$	M	,,	,,	$\begin{array}{c} 63 \\ 64 \end{array}$	$\frac{3}{3'}0''$	F M
·· ··	$\begin{array}{c c} 74 \\ 74 \end{array}$	2'0''	M M	,, ,,	$\begin{array}{c} 65 \\ 72 \end{array}$	50 8'0″	\mathbf{F} \mathbf{F}	,,	,,	$\frac{64}{72}$	30 8'0″	F
** **	7^{\pm}_{72}	2 0 8' 0"	F	,, ,,	69	$\frac{80}{4'0''}$	r F	,,	**	70	1'0''	M
·· ··	71	7'0"	M	** **	70	5'0''	F	,,	"	71	5'0''	F
,, ,,	74	10'0"	M	""	73	5'0"	M	,,	"	$71 \\ 72$	5 0 7′ 0″	M
** **	78	7'0''	F	,, ,,	72	4'0"	F	,,	"	80	6′ 0″	F
** **	71	5′ 0″	M	·· ··	67	$\frac{1}{5'2''}$	M	,,	"	74	2'0''	M
,, ,,	75	4'0''	F	² / ₁ ,,	72	9' 0"	M	,,	"	69	$\bar{2}' \bar{0}''$	M
,, ,, ,, ,,	71	9' 0"	F		75	3' 0"	M	"	"	70	5'0''	F
³⁰ / ₁₂ ,,	73	8' 0"	M	·· ·· ·· ··	77	8'0"	F	" "	,, 	65	4'9''	M
	70	4'0''	Μ		70	6'0"	M		"	73	6' 0"	F
,, ,, ,, ,,	67	4'0''	\mathbf{F}	·· ·· ··	69	6'0"	M	4]/1	" "	70	2'0''	M
** **	73	10' 0''	F	,, ,,	75	4' 0"	M	,,	,,	75	8' 0"	F
,, ,,	72	8' 0''	F	,, ,,	71	8'0"	F	,,	,,	72	8'0"	M
,, ,,	67	4'0''	\mathbf{F}	,, ,,	78	7'0"	Μ	,,	,,	75	9′ 0″	M
,, ,,	78	4'0''	\mathbf{F}	,, ,,	74	8.0″	M	,,	,,	73	6' 0"	F
·· ··	75	7' 0"	Μ		74	<i>∫</i> 8′ 0″	Μ	,,	,,	72	9'0"	M
,, ,,	75	1'0"	F	,, ,,	1	18'0"	F	,,	,,	73	1'0''	F
,, ,,	72	6' 0"	M	·· ··	70	7'0"	M	••	,,	64	3' 6"	M
·· ··	70	4' 0''	F	,, ,,	$\frac{67}{70}$	1'0''	M	,,	,,	74	$\frac{3'0''}{5'0''}$	F
,, ,,	70	$rac{2'0''}{4'5''}$	F	,, ,,	70	6'0"	M	,,	"	66 C2	$5'0'' \\ 1'0''$	F M
$\frac{31}{12}$,	67 67	$\frac{4}{5'0''}$	\mathbf{F}	,, ,,	$\begin{array}{c} 74 \\ 74 \end{array}$	5'0'' 5'0''	M	,,	,,	$\begin{array}{c} 63 \\ 68 \end{array}$	1'6''	M
·//12 ,,	$\begin{array}{c} 67 \\ 76 \end{array}$	$\frac{5}{2'6''}$	M M	,, ,,	64	3 0 4′ 0″	$\left \begin{array}{c} M \\ M \end{array} \right $	59	"	68	7'0"	M
» »	70	$\frac{2}{6'} \frac{0}{0''}$	\mathbf{F}	,, ,,	70	$\frac{4}{6'}0''$	M	"	,,	68	7'0"	M
·· ··	76	5'0"	M	,, ,,	69	8'0"	F	"	"	74	6'0"	F
** **	67	1'6''	F	,, ,,	75	7' 0"	M	,,	,,	$\overline{74}$	4′ 0″	F
·· ··	76	9′ 0″	F	·· ··	71	7' 0"	M	"	,, 	70	5' 0"	M
·· ··	73	9' 0"	F	·· ··	$\overline{75}$	10' 0"	M	,,	,, 	€6	3'0''	M
,, ,, ,, ,,	64	2'0''	M	·· ··	76	9'0"	M	" "	,, ,,	70	6′ 0″	F
,, ,,	75	9′ 0″	F	,, ,,	75	9.0″	F	,,	"	68	9′ 0″	F
,, ,,	69	5'0''	\mathbf{F}	,, ,,	68	4'0''	\mathbf{F}	,,	,,	71	4'0''	M
,, ,,	74	5' 0''	\mathbf{F}	,, ,,	70	2' 6''	Μ	,,	,,	72	5'0"	F
,, ,,	75	6′ 0″	Μ	,, ,,	74	6'0"	F	,,	,,	71	8'0"	F
,, ,,	72	8'0"	M		77	2'0''	M	,,	,,	74	7' 0''	M
·· ··	69 69	5'0''	M	3/1 ,,	74	5'0''	M	,,	,,	75	5'0''	M
** **	$69 \\ 70$	5'0''	M	,, ,,	71	4'0''	F	,,	,,		5'0"	M
,, ,,	70	2' 6''	M	,, ,,	$\frac{76}{70}$	3' 6"	M	,,	,,	75	$\frac{4'6''}{5'2''}$	M
»» »»	71	$\frac{4'0''}{2'0''}$	M	,, ,,	70	5'0'' 3'0''	F	57	••	69 60	5'3''2'0''	M M
** **	75 66	$\frac{2'0''}{2'0''}$	F	,, ,,	73 77	3'0" 9'0"	M	5/1	••	69	$\frac{2}{1'} \frac{0}{6''}$	M
** **	$\begin{array}{c} 66 \\ 75 \end{array}$	$\frac{2}{8'0''}$	F F	** **	71	90'' 10'0"	$\mathbf{F}_{\mathbf{M}}$,,	"	76 67	$\frac{10}{4'0''}$	M
·· ··	75 73	$\frac{80}{4'0''}$	M	,, ,,	$\frac{71}{76}$	10 0 8'0″	M M	,,	,,	65	4'0"	M
** **	73 74	$\frac{4}{7'}0''$	F M	,, ,,	$\frac{70}{73}$	4'0"	\mathbf{F}	,,	**	69	$\frac{4}{5'0''}$	M
·· ··	71	7'6"	M	,, ,,	$\frac{13}{72}$	1'0"	M	"	••	69	3'0"	M
** **	72	9'6"	F	** **	68	3'0"	F	"	**	70	4'0"	M
** **			L 11	,, ,,				,,	**			

when neasur			ngth.	Sex.	Da		Lei	ngth.	Sex.	Da whe		Trei	ngth.	Se
		Mother.	Foetus.	DEX.	wh measu		Mother.	Foetus.	Sex.	measi		Mother.	Foetus.	1.06
		Engl. ft.	Engl.ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
5 / / 1	4 0	74	9' 0"	М	9 , 1	40	77	8'0"	М	13/1	40	75	7' 0"	1
		75	6' 0"	M			72	9' 0"	F			70	5'0''	F
,,	,,	74	5' 0"	M	,,	,,	71	4' 0"	F.	,,	,,	$\frac{10}{72}$	7'0''	1
,,	,,	$6\overline{5}$	6' 0"	M	,,	,,	74	8'0"	F	"	"	71	5' 0"	Ĵ
,,	"	73	9' 0"	M	,,	,,	69	6' 0"	M	,,	"	75	13' 0"	I
"	••	78	$\frac{50}{7'0''}$	F	"	"	70	7' 0"	M	,,	"	75	10'0"	li
••	"	64	2'0''	M	,,	••	76	9'0"	F	"	,,	76	5'0''	Ĩ
"	"	75	3'0"	M	,,	,,	78	5'0"	F	,,	,,	77	5'0"	j
,,	,,	70	4'0"	M	107	,,	71	6'0"	M	,,	,,	79	9'0"	li
,,	"	$70 \\ 72$	$\frac{4}{6'}\frac{0}{0''}$	M	10/1	,,	72	14'0"	F	,,	,,	75	$\frac{3}{4'}0''$	j
6]1	,,				,,	,,				,,	,,			
1/1	,,	72	9'0''	F	•,•	•,	$65 \\ -5 \\ -5 \\ -5 \\ -5 \\ -5 \\ -5 \\ -5 \\ $	5'0"	F	,,	,,	75	1'0''	
,,	,,	72	8'0"	M	,,	••	65	2'0''	F	,,	,,	70	7'0"	1
,,	,,	76	8'0"	M	,,	,,	67	5'0''	M	,,	,,	74	11'0"]]
,,	,,	71	8'0"	F	,,	,,	$\frac{72}{72}$	9'0"	F	,,	,,	68	4'0"	
,,	,,	67	2'0''	M	.,	,,	72	8' 0"	F	,,	,,	69	6'0"	
,,	,,	68	1 ′ 0″	M	,.	, ,	68	5'0''	\mathbf{F}	,,	••	74	4'0'']]
,,	, ,	67	5'0''	F	,,	••	69	5' 0"	M	••	,,	72	10'0"	1
,,	, ,	69	2'0''	M	•,	, ,	70	8'0"	\mathbf{F}	,,	,,	69	5'0''	
••	,,	76	8'0"	M		,,	73	9' 0"	M	.,	,,	72	4'0''	13
		78	10'0"	M			72	7'6"	F			70	5'0''	1]
7/1	,, ,,	72	4' 0"	F	,,	;;	76	10'3"	F	**	,,	69	5' 0"	
		70	4'0"	M	,,	,,	73	10'11"		,,	,,	71	5' 0"	
,,	••	78	10' 0"	F	11/1	"	71	5' 0"	M	**	,,	71	5' 0"	
,,	,,	68	3'0"	M		••	71	8'0"	F	,,	,,	$\overline{74}$	6' 0"	
"	"	75	8'0"	F	,,	,,	73	8'0"	M	,,	,,	77	6'0"	
**	"	73	8'0"	M	"	,,	72	5'0"	M	14/1	,,	75	10'0"	
,,	"	74	8'0"	M	- ,,	,,	71	3'0"	M	/1	,,	71	9'0"	
,,	,,	1	7'0"		,,	,,	1			,,	,,		8'0"	
"	,,			M	,,	,,	70	5'0''	M]] ,,	,,	77		
s_{1}^{2}	,,	74	7'0''	M	,,	,,	70	10'0''	F	,,	,,	75	6'0''	
°/1	,,	76	2'0"	F	•••	,,	76	12'0"	F	••	••	66	3'0"	
••	••	67	4'0 "	M	· · ·	,,	76	6' 0"	M	,,	,,	75	6' 0"	-
••	••	61	7' 0"	M	•••	,,	72	9′ 0″	М	,,	,,	74	10' 0"	
••	••	71	10'0"	$ \mathbf{F} $,,	,,	72	4' 0"	\mathbf{F}	,,	,,	75	11'0"	
, ,	, ,	77	5'0"	M			74	8'0"	M	,,	,,	76	9' 0"	
,,	,,	78	7'0"	M	12/1	,,	71	8' 0"	F	·,,	,,	69	1' 0"	
,,	,,	68	5'0"	\mathbf{F}	,,	,,	68	5'0"	M	· ,,	,,	73	7' 0"	
,,	,,	73	10'0"	M	,,	,,	72	9'0"	M	,,	,,	70	7' 0"	
,,	,,	71	5'0"	F	,,	,,	74	8'0"	\mathbf{F}	,,	,,	70	4'0''	
,,	,,	70	8' 0"	M	,,	,,	71	11'0"	M	,,	,,	68	3' 0"	
,,	,,	75	4'0"	M	,,	,,	73	6' 0"	F	,,	,,	76	5'0"	
		70	9'0"	F	11		73	4'0"	M	11		73	8'0"	
,, ,,	" "	66	5' 0"	M	"	,, 	75	2' 0"	F	,, ,,	"	73	7' 0"	
		73	10' 0"		,,	,,	75	8' 0"	M		,,	72	5' 0"	
••	••	74	9' 0 "		,,	,,	75	3' 0"	F	,,	,,	74	5' 0"	
••	••	69	6'0"		,,	••	77	10' 0"	M	15/1	,,	75	9' 0"	
971	••	74	8'0"	M	.,	••	75	6'0"	M	/1	,,	69	5' 0"	
	,,	69	3'0"	M	.,	••	68	6'0"	F	,,	,,	74	$\frac{3}{2'} \frac{0''}{0''}$	
••	••	1				••				,,	,,			
••	••	73	10'0''	F	•••	,,	65	5'0''	M	,,	,,	74	9' 0''	1
••	••	73	7'0"		,,	,,	72	6'0"	M	,,	,,	$\frac{71}{70}$	5'0"	
, ,	••	73	9'0"	M	,,	,,	70	8'0"	F	,,	,,	76	5'0"	
;,	••	73	2'6"		,,	••	72	4'0"	M	ļ,,	,,	68	1'6''	
,,	,,	72	9' 0"		.,	,,	70	11'0"	\mathbf{F}	·,,	,,	72	7' 0"	
,,	,,	73	5' 0"	1	,,	,,	73	6'0"	M	,,	,,	66	5' 0"	
,,	,,	67	3' 0"	M	,,		75	10'0"	F	,,	,,	72	10' 0"	
		68	3' 6"		11	"	71	9'0"	F	1		74	8'0"	
,, 	"	76	10' 0"		,,	**	71	4' 0"	M M	,,	,,	75	8' 0"	
·,	"	75	3' 0"		,,	"	72	10' 0"	F	**	,,	76	5' 0"	
,, ,,	,, ,,	77	3' 0"		,, ,,	" "	75	5'0"	F	,, ,,	,, ,,	72	12'0"	

 $Table No. 9. - Fin-whale foetuses ({\tt cont.}).$

Table No. 9.-Fin-whale foetuses (cont.).

Date	Lei	ngth.	9	Date	Lei	ngth.	G	Dat		Ler	ngth.	
when neasured	· Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Se
	Engl. ft.	Engl.ft.			Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
¹⁵ / ₁ 40	72	11'0″	M	17/1 40	73	10' 0"	M	¹⁹ /1	40	77	2' 0"	N
,, ,, ,, ,,	71	5' 0"	M	,, ,,	74	3' 0"	М	,,	,,	73	3'0''	N
,, ,,	77	13'0''	F	,, ,,	69	5'0''	M	,,	"	75	11'0"	F
,, ,,	72	9' 0″	$ \mathbf{F} $		77	8'6"	F	,,		71	9' 0"	F
,, ,,	76	2'0''	\mathbf{F}		77	10' 0"	M		"	70	3' 0"	N
	73	2'0''	F	,, ,,	74	12'0"	M	,,	"	75	5'0"	F
,, ,,	77	5'0''	M	,, ,,	68	7' 0"	$ \mathbf{\tilde{F}} $,,	,,	74	10'0"	N
** **	70	7' 0"	M	,, ,,	67	2'0''	M	,,	"	$\overline{72}$	7' 0"	N
,, ,,	65	2' 0"	M	,, ,,	74	4 '0"	F	"	,,	71	5'0"	I
·· ··	70	$\bar{4}'0''$	M	,, ,,	71	12'0"	M	"	"	72	7' 0"	I
» »	74	6'0"	M	18/_ "	69	8'0"	$\mathbf{\widetilde{F}}$	"	••	73	12' 0"	Ē
,, ,,	$\overline{75}$	7' 0"	F	10/1 ,,	76	3' 0"	M	,,	"	73	3'0"	Ī
""	75	8' 0"	M	,, ,,	74	12' 0"	F	,,	"	75	9' 0"	I
** **	74	6' 6"	F	,, ,,	71	4'0"	M	,,	,,	76	5' 0"	N
· · · ·	69	8' 0"	M	,, ,,	77	$\frac{1}{3'0''}$	M	,,	**	68	4'6"	Î
** **	71	5'0"	F	,, ,,	65	6'0"	F	"	"	70	$\frac{1}{3'0''}$	lî
·· ··	1 71	1'0"	M	** **	66	9'0"	M	"	,,	71	9'0"	Î
·· ··	79	5'0"	F	,, ,,	69	5'0"	F	"	,,	69	1' 6"	Î
·· ··	73	8'0"	F	,, ,,	69	6'0"	M	20/1	,,	74	11'0"	ĺ
»» »»	77	5'0"	M	,, ,,	71	8'0"	F		,,	73	7'0"	Ī
16/1 ,	74	10'0"	F	** **	78	8'0"	M	>7	"	64	8'0"	Î
	71	$10 \ 0 \ 2' \ 6''$	Ē	,, ,,	77	10'0"	F	>>	"	71	12'0"	1
·· ··	69	$\frac{2}{5'0''}$	M	,, ,,	74	$\frac{10}{3'}0''$	F	,,	"	74	$\frac{12}{3'0''}$	
» »		5'0''		,, ,,		3 0 8' 0"		,,	••		11'0"	I
·· ·		10'0''	M	,, ,,	73		M	,,	••		$\frac{11}{4'0''}$	
·· ·	76	9'0"	M	,, ,,	74	$\begin{array}{c c} 2' 0'' \\ 6' 0'' \end{array}$	M	,,	,,	61	8'0"	
· · · ·			F	,, ,,	75		M	,,	,,	73	$ \frac{30}{7'0''}$]
»» »	$67 \\ 50$	5'0''	M	,, ,,	69	7'0"	M	,,	,,	70		
·· ·	70	6'0"	M	,, ,,	71	10'0"	M	,,	,,	70	$\begin{vmatrix} 6' 0'' \\ 10' 0'' \end{vmatrix}$	1
» » ,	79	4'0''	F	,, ,,	71	11'0"	M	,,	,,	71		
,, ,	74	1'0''	F	,, ,,	$\overline{72}$	5'0''	M	,,	,,	75	5'0''	
·, ,	75	10'0"	F	,, ,,	75	6'0"	M	,,	,,	67	8'0"	
,, ,	76	9'0"	M	,, ,,	76	6'0"	M	,,	,,	73	10'0"	1
,, ,	75	11'0"	M	,, ,,	65	2'0''	\mathbf{F}	,,	,,	75	12'0"	
,, ,	, 72	8'0"	M	,, ,,	71	8'0"	M	,,	,,	79	1'6"]]
,, ,	, 71	8'0"	\mathbf{F}	,, ,,	73	7' 0"	Μ	"	,,	72	2' 0"	-
,, ,	75	8'0"	Μ	,, ,,	74	3' 0"	\mathbf{F}	,,	,,	75	12'0"	
,, ,	68	3' 0"	F	,, ,,	74	4'0''	$ \mathbf{F} $,,	,,	75	9' 0"	
,, ,	, 67	7' 0"	$ \mathbf{F} $,, ,,	67	6'6"	F	,,	,,	74	10' 0"	
,, ,	, 71	5' 0"	M	,, ,,	73	2'0''	Μ	,,	,,	75	5'0"	
,, ,	, 72	5'0"	\mathbf{F}	,, ,,	64	2'0''	M	.,,	,,	73	4'0"	
,, ,	, 74	6'0"	F	,, ,,	68	10'0"	M	,,	,,	66	5'0"	
,, ,	, 74	7'0"	\mathbf{F}		68	11'0"	M	,,	,,	70	9'0"	
,, ,	, 70	8'0"	M	19/1 ,,	74	9'0"	\mathbf{F}	,,	,,	75	5' 0"	
,, ,	, 72	9'0"	\mathbf{F}	,, ,,	73	10'0"	M	· · · ·	,,	69	10' 0"	
,, ,	, 62	7'0"	\mathbf{F}	,, ,,	70	5'0"	M	,,	,,	65	2' 3"	
	, 72	7'0"	Μ	,, ,,	72	10'0"	M	1	,,	76	7'0"	
17/1 ,	, 69	2'0"	M	,, ,,	73	12'0"	F	21/1	,,	69	8'0"	
,, ,	72	9'0"	M	,, ,,	74	3'0"	M	,,	,,	77	11'0"	
,, ,	, 74	8'0"	\mathbf{F}	,, ,,	75	9'0"	M	,,	,,	72	5' 0"	
,, ,	72	8'0"	M	,, ,,	66	2'0"	M	,,	,,	67	5' 0"	
,, ,	69	1'0"	M	,, ,,	69	4'0"	F	,,	,,	67	3' 0"	
,, ,	67	5'0"	\mathbf{F}	,, ,,	76	8'0"	M	,,	"	78	2'0"	1
·, ·,	1 73	9'0"	M		69	7' 0"	F	,,		77	6' 0"	1
	74	7' 0"	M		66	2'0"	M	,,	,, 	74	10' 0"	1
	70	1'0"	M		77	5' 0"	F		"	75	2' 0"	
·· ·	1 72	9'0"	M	** **	65	3' 0"	M	**	"		[4' 0"	
** *	73	10' 0"	M	** **	75	7'0"	F	,,	,,	69	1 4' 0"	
,, ,	173	12'0"	M	** **	74	10'0"	Ē	H		73	2' 0"	' ·

Da wh		Lei	ngth.	Sex.	Da		Ler	ngth.	Sex.	Dat whe		Ler	ngth.	Sex.
measi		Mother.	Foetus.	Sex.	wh meas		Mother.	Foetus.	Sex.	measu		Mother.	Foetus.	SCA.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ít.	Engl. ft.	
²¹ / ₁	4 0	76	4'0"	M	²⁴ /1	40	70	7'0"	F	²⁸ /1	40	73	8'0"	M
22/	••	$\frac{68}{70}$	8'0" 8'0"	F	,,	,,	74	$\frac{6'0''}{11'0''}$	M	,,	,,	66	7'0'' 4'0''	\mathbf{F} M
	••	$\begin{bmatrix} 70 \\ 74 \end{bmatrix}$	8'0" 10'0"	M F	25	,,	$\begin{array}{c} 69 \\ 74 \end{array}$	$\frac{1}{9'0''}$	M M	,,	,,	$\begin{array}{c c} 67\\70\end{array}$	$\frac{40}{4'0''}$	F
••	••	117773	11'0"	M	<i>i</i> 1	"	64	9′0″	F	,,	,,	73	<u><u>s</u>'0"</u>	F
,, ,,	,, ,,	69	10' 0"	M	,, ,,	,, ,,	70	7'0"	M	,, ,,	" "	73	10' 0"	\mathbf{F}
		73	∫10´0″ -	M	,,	,,	74	4' 0″	\mathbf{F}	,,	,,	73	10' 0"	\mathbf{F}
••	•;	1	9'0''	M	,,	,,	78	5' 0"	F	,,	••	73	15'0"	F
••	••	$\begin{array}{c} 69 \\ 71 \end{array}$	5'0'' 2'0''	M M	,,	,,	$\begin{array}{c c} 69 \\ 71 \end{array}$	$rac{6'0''}{5'0''}$	\mathbf{F}	,,	,,	$\begin{array}{c c} 73\\75\end{array}$	$\begin{array}{c c} 15' 0'' \\ 9' 0'' \end{array}$	F M
,,	,,	$\frac{71}{71}$	$\frac{2}{3'}\frac{0}{0''}$	M	,,	,,		8'0"	г М	,,	,,	75 75	9'0"	M
,,	"		(13'0"	F	,,	,,	71	5'0"	F	,,	"	78	6'0"	M
,,	••	73	13' 0"	F	,, ,,	" "	68	5'0''	M	,, ,,	" "	71	6'0"	\mathbf{F}
,,	,,	73	5'0"	M	,,	,,	66	4' 0"	M		,,	74	9' 7"	M
,,	••	74	5'0''	M	,,	,,	72	7'0''	M	²⁹ /1	,,	74		F
,,	,,	$\begin{bmatrix} 74 \\ 70 \end{bmatrix}$	10'0" 8'0"	F M	,,	,,	$\begin{array}{c c} 70\\ 66\end{array}$	$rac{10'0''}{5'3''}$	F M	,,	,,	$\begin{array}{c} 70 \\ 72 \end{array}$	6' 0'' 7' 0''	F M
237	,,	70	6'0"	F	,,	,,	71	5'0''	M	,,	,,	68	3' 0"	M
, 1 , 1	,,	78	3' 0"	M	,,	,,	71	8'1"	M	,,	,,	73	10'0"	F
,, ,,	,, ,,	$\overline{72}$	4'0"	F	,, 	,, ,,	71	$5'\overline{6''}$	F	,, ,,	,, ,,	69	4' 0"	Μ
••	,,	74	10'0"	\mathbf{F}	²⁶ /1	,,	68	5'0''	Μ	,,	,,	71	3' 6"	Μ
,,	,,	73	6'0''	M	,,	,,	70	6′0″	M	,,	,,	75	7'0"	M
••	,,	75	5′0″ 6′0″	M	,,	,,	76	$rac{7'0''}{2'0''}$	F	;;	,,	75	8′0″ (10′0″	F M
,,	••	$\begin{array}{c} 74 \\ 70 \end{array}$	4'0"	M M	,,	,,	$\begin{array}{c} 70 \\ 75 \end{array}$	$\frac{2}{9'0''}$	F M	,,	,,	72	10'0"	M
,,	,,	69	$\frac{4}{2'0''}$	M	,,	,,	73	5'0''	F			70	2'0''	F
" "	,, ,,	72	11'0"	F	,, ,,	,, ,,	76	2'0''	M	,, ,,	" "	74	2'0''	\mathbf{F}
,,	,,	72	5'0''	F	,,	,,	75	5'0''	\mathbf{F}	,,	,,	77	12'0''	\mathbf{F}
,,	,,	75	10'0"	M	,,	,,	76	7'0"	M	,,	,,	68	7'6"	F
••	"	74	11'0"	M	,,	,,	70	$\frac{8'0''}{7'0''}$	F	"	"	$\frac{73}{77}$	9'0''	M
••	,,	$\begin{array}{c c} 72\\74 \end{array}$	8' 0" 6' 0"	$\left \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right $	"	"	73 70	7'0'' 5'0''	F F	"	"	77 75	7'0'' 6'0''	F F
,,	••	67	6'0"	M	27/1	,,	$\frac{10}{72}$	11'0"	M	••	,,	69	5' 0"	F
,, ,,	,, ,,	68	5'0''	M.	, 1 ,,	,,	$\overline{72}$	10' 0"	M	,,	,,	68	7'6"	$\mathbf{\hat{F}}$
,,	,,	74	12'0"	M	,,	,, ,,	72	10.0″	F	³⁰ /1	,, ,,	71	5' 0"	\mathbf{F}
;,	••	71	6´0″	Μ	,,	,,	73	10'0"	M	,,	,,	76	11'0"	F
24/1	,,	$\frac{71}{75}$	3'0'' 9'0''	M	"	,,	76	${11'0''\over5'0''}$	M	,,	,,	$\frac{76}{75}$	10' 0" 8' 0"	\mathbf{F} \mathbf{F}
	••	$75 \\ 72$	9 0 8'0″	F M	,,	,,	$\begin{array}{c} 72 \\ 75 \end{array}$	6'0"	M F	,,	••	$\begin{array}{c} 75 \\ 75 \end{array}$	12'0''	F
••	,,	71	8'0"	M	,,	,,	78	8'0"	M	,,	"	70	4 '0"	M
,, ,,	,, ,,	76	6' 0"	F	,, ,,	,, ,,	74	7'0''	M	" "	" "	72	4'0"	M
,,	,,	74	4'0"	M	,,	,,	71	5'0"	F	,,	,,	70	7'0"	M
,,	,,	$73 \\ 74$	13'0''	F	,,	,,	76	12'0''	M	,,	,,	71	5'0''	M
,,	,,	$\begin{array}{c c} 74\\74\end{array}$	$\begin{vmatrix} 7'0'' \\ 8'0'' \end{vmatrix}$	M M	"	"	$\begin{array}{c} 70 \\ 69 \end{array}$	${9'0''\over 4'8''}$	M M	"	,,	70 66	14′ 0″ 7′ 0″	\mathbf{F}
,,	,,	$\frac{74}{72}$	10'0"	M	"	"	64	4 0 3' 3"	F	"	"	74	12'0"	M
"	"	76	9'0"	M	28/1	"	72	8'0"	F	,, 	,, 	73	4'0"	M
,, ,,	,, ,,	68	4'0"	M	,,	,, ,,	73	4'0''	F	" "	" "	66	9′0″	\mathbf{F}
,,	,,	74	11'0"	Μ	,,	,,	73	7' 0"	\mathbf{F}	,,	,,	73	10'0"	M
••	,,	70	1'0''	M	••	,,	69	9'0''	F	,,	,,	67	6'0''	F
••	,,	71 71	7′0″ 6′0″	M	,,	,,	$\begin{bmatrix} 73 \\ 70 \end{bmatrix}$	$\frac{9'0''}{3'0''}$	M	,,	,,	70 68	8'0" 5'0"	F M
,,	••	$\frac{71}{75}$	1'0"	F M	••	••	66	$\frac{3}{6'0''}$	M M	,,	,,	$\begin{bmatrix} 68 \\ 70 \end{bmatrix}$	6'0''	F
.,	,, 	70	10'0"	M	,,	"	65	6′0″	F	"	"	73	6'0''	F
,, ,,	,, ,,	68	8'0"	F	,, ,,	" "	70	5'0''	F	,, ,,	" "	72	11'0"	Μ
,,	"	73	9'0"	M	,,	,,	73	5'0"	F	,,	,,	68	9'0"	F
,,	,,	75	5'0''	M	,,	,,	70	5'0''	F	,,	,,	67	1'0" 5'0"	F
"	,,	75	6' 6"	$ \mathbf{F} $,,	,,	75	8' 0"	F	,,	"	72	50"	L L

Table No. 9.—Fin-whale foetuses (cont.).

Table No. 9Fin-whale,	foetuses ((cont.).	
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Date when		Ler	ngth.	Sex.	Da wh		Ler	ngth.	Sex.	Da wh		Lei	ngth.	Sex.
measur		Mother.	Foetus.	Joa.	meas		Mother.	Foetus.	Joan.	measu		Mother.	Foecas	
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
30/1	40	78	10' 0"	F	$\frac{2}{2}$	40	68	7'0"	M	4/2	40	74	12'0"	M
,,	,,	75	9' 6"	\mathbf{F}	,,	,,	73	8' 0"	M	, -	,,	78	10' 0"	M
,,	,,	75	6'0"	\mathbf{F}	,,	,,	72	7' 0"	\mathbf{F}	,,	,,	73	4'0''	\mathbf{F}
,,	,,	68	3'0''	M	,,	,,	76	5'0''	Μ	,,	,,	76	13'0''	M
,,	,,	75	4'0''	M	,,	,,	72	7' 0"	\mathbf{F}	,,	,,	73	9' 0"	F
,,	,,	71	7' 6"	\mathbf{F}	,,	,,	72	7′ 0″	F	,,	,,	73	8'0"	\mathbf{F}
,,	,,	75	11'6''	Μ	,,	,,	72	4'0''	F	,,	,,	71	9' 0"	M
	,,	72	5'0''	Μ	,,	,,	68	11'0"	Μ	,,	,,	65	5'0"	F
*1/1	,,	74	12'0''	F	••	,,	65	9'0''	F	,,	,,	74	5'0"	F
,,	••	74	12'0''	F	,,	,,	70	10'0''	M	,,	"	73	2'0''	M
,,	••	71	10'0''	M	,,	,,	70	8'0"	F	,,	"	68	4' 0" 10' 0"	F
,,	••	72	13'0''	F	,,	,,	71	$ \begin{array}{c} 3' 0'' \\ 8' 10'' \end{array} $	M	,,	,,		10'0"	M M
,,	;;	74	7' 0" 8' 0"	M	3"/2	,,	66	12'0''	F F	,,	,,	68 75	11'0"	F
,,	"	$\begin{array}{c} 69 \\ 71 \end{array}$	$\frac{80}{12'0''}$	\mathbf{F} \mathbf{F}	Į.	,,	73 69	$\frac{12}{11'0''}$	M	,,	"	75 70	10'0"	r F
,,	**	66	5'0''	M	,,	,,	75	14'0''		,,	"	68	8'0"	F
,,	;;	70	5 0 6' 0"	M	**	,,	73	14 0 8'0"	M F	,,	"	72	11'0"	F
,,	;,	74	8'0"	F	,,	,,	73	6'0"	F	,,	"	67	9'0"	M
**	"	74	11'0"	M	"	••	73	$\frac{0}{4'}0''$	M	"	**	72	7'0"	F
••	;;	69	8'0"	F	"	"	76	7' 0"	F	"	"	75	9'0"	M
, ,	"	76	12' 0"	M	,,	,,	73	4' 0"	M	5/2	,,	75	7' 0"	M
», 	"	67	2'0''	F	"	"	76	4'0"	F		"	75	14' 0"	M
,, ,,	»	64	4'0''	M	,, ,,	,, ,,	75	10' 0"	M	,, ,,	"	70	5'0"	F
,,	" "	70	5' 0"	F	,,	,,	79	4'0''	F	,,	" "	76	10'0″	M
,,	**	73	7'0"	Μ	,,	,,	67	12'0"	F	,,	,,	71	14'0"	Μ
,,	"	76	6'0"	Μ	,,	,,	66	5'0"	F	,,	,,	75	14'0"	M
,,	,,	73	12'0''	Μ	,,	,,	71	4'0''	F	,,	,,	74	12'0"	\mathbf{F}
	,,	74	6'0"	\mathbf{F}	,,	,,	74	10'0"	F	,,	,,	73	3' 0"	M
1]/2	,,	80	13'0''	Μ	,,	,,	69	15'0''	\mathbf{F}	,,	,,	73	12'0''	M
,,	,,	69	6'0"	Μ	,,	,,	78	7'0"	M	,,	,,	73	10'0"	F
,,	••	70	5'0"	F	,,	,,	71	2'0"	F	,,	,,	72	11'0"	M
,,	,,	73	10'0"	M	,,	,,	72	6'0"	F	,,	,,	73	7'0"	M
,,	,,	$\frac{70}{70}$	12'0''	F	,,	,,	72	8'0"	M	,,	"	73	8'0" 7'0"	M
••	••	70	5'0'' 5'0''	M	,,	,,	70	11'0"	M	,,	,,	74.	3'0"	M F
,,	••	$\begin{array}{c} 77 \\ 72 \end{array}$	9'0"	\mathbf{F} \mathbf{F}	"	,,	$\begin{array}{c} 75 \\ 72 \end{array}$	10′ 0″ 9′ 0″	M M	,,	**	71	13'0"	M
••	••	$\frac{12}{76}$	8'0"	г F	,,	••	66	90 4'0″	F	,,	"	74	$\frac{13}{4'0''}$	F
,,	••	70	8'0"	F	"	,,	72	8'0"	M	,,	"		19'0"	F
,,	**	71	6'0"	M	,,	,,	69	10' 0"	M	,,	,,	77	19'0"	M
" "	" "	78	4 ′ 0″	M	,, ,,	"	70	11'0"	F	,,	••	76	14'0"	F
,,	,,	65	5'0"	F	,,	" "	70	2'0''	M	,,	,,	77	11'0"	M
,,	,,	71	10'0"	M	,,	,,	73	13' 0"	M	,,	,,	70	9'0"	\mathbf{F}
,,	,,	76	5'0''	F	,,	,,	77	8' 6"	M	,,	**	72	9'0"	M
,,	,,	68	3'0"	\mathbf{F}	,,	,,	70	9' 6"	F	,,	,,	68	9'0"	M
••	,,	73	10′ 0″	\mathbf{F}	,,	,,	72	9′ 0″	M	,,	,,	72	10'0"	F
,,	••	70	7' 0"	M	,,	,,	74	6' 0"	Μ	,,	,,	78	8'0"	M
,,	,,	75	13'0"	F	."	,,	68	5'0"	F	,,	,,	70	10'0''	M
	••	67	6' 6"	F	$\frac{4'}{2}$,,	70	10'0"	F	,,	,,		9'0"	F
2)2	,,	70	5'0''	F	,,	"	74	5'0"	M	,,	,,	69	6'0''	M
,,	••	73 79	12'0''	F	,,	,,	73	14'0"	M	,,	,,		13'0" 11'0"	F F
,,	••	$72 \\ 72$	9'0'' 5'0''	M	,,	,,	73	8'0"	M	,,	••		$\frac{11}{7'0''}$	M
;,	**	$\begin{array}{c} 73 \\ 75 \end{array}$	13' 0"	F F	,,	,,	79	$12'0'' \\ 8'0''$	M	,,	,,	$\begin{bmatrix} 71 \\ 72 \end{bmatrix}$	5'0"	F M
,,	"	75 74	$130 \\ 5'0''$	F	,,	,,	$\begin{array}{c c} 78 \\ 74 \end{array}$	8 0 5'0″	M F	,,	"	72	9'0"	M
,,	,,	74	$50 \\ 5'0''$	F F	,,	,,	74	$\frac{50'}{6'0''}$	F	"	**	74	$\frac{90}{4'0''}$	M
"	"	70	9'0"	M	,,	,,	71 79	3'0''	F	,,	••	74	5'0''	M
••	**		6'0''	F	,,	"	81	6'0"	F	"	,,	77	9'0"	F
,,	**	76	9'0"	F	,,	,,	69	5'0"	F	"	**	70	14'0"	M
**	"			1 - 1	***	,,	1 00		1 - 22	.,,	••		1 0	,

Da		Lei	ngth.	8	Da		Lei	ngth.	C	Da		Ler	ngth.	0
wh neas	en ured.	Mother.	Foetus.	Sex.	wh meas		Mother.	Foetus.	Sex.	wh meast		Mother.	Foetus.	s
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
$\frac{5}{2}$	40	72	12'0"	F	$7/_{2}$	40	69	7' 0"	\mathbf{F}	$^{8}/_{2}$	4 0	75	12' 0"	F
		75	12'0''	F			69	10' 0"	F			71	6'0 ″	Ē
⁶]/2	••	70	7' 0"	M	,,	"	71	9'0"	F	,,	,,	72	12' 0"	Ĩ
	"	71	13' 0"	F	,,	,,	73	15' 0"	F	ه/2	**	71	12'0''	Ā
"	,,		f 6'0"	F	••	"	75	5'0''	F		,,	$\frac{71}{73}$	8'0"	Ē
,,	••	78	5 0100	\mathbf{F}^{+}	"	,,	76	13'0"	M	"	,,	74	14'0''	Ī
		78	16'0'' 12'0''	F	,,	,,	77	13 0 12'0"	F	,,	"	76	14'0''	N
••	,,	68	$\frac{12}{4'0''}$	M	,,	,,	77	$\frac{12}{6'}\frac{0''}{0''}$	F	"	,,	$\frac{10}{72}$	10'0''	F
••	,,	$\frac{03}{74}$	8'0"	M	,,	••	70	9'0"	M	,,	,,	$\frac{72}{75}$	10'0"	N
••	,,	$\frac{74}{73}$	3'0"	M	••	;,	74	$\frac{50}{7'0''}$	M	,,	,,	$\begin{array}{c} 13\\72\end{array}$	10'0"	1
••	;,	$\frac{15}{75}$	13'0''	M	,,	,,	80	9'0"	M	,,	,,	71	10'0"	N
••	,,	$\frac{13}{72}$	$\frac{13}{4'0''}$	F	••	,,		90 6'0″	F F	,,	,,		13 0 6'0″	1
,,	,,		9'0"	F	••	,,	76		F F	,,	,,	$\begin{bmatrix} 74\\ co \end{bmatrix}$	4'θ"	N
••	,,	76 59	$\frac{9}{6'}\frac{0}{0''}$,,	,,	71	$\frac{6'0''}{0''}$,,	,,	68	4 0 7'0″	I.
••	,,	$\frac{72}{54}$	0 0 1'0″	F	, ,	,,	$\frac{63}{-5}$	8'0"	F	,,	,,	74	10'0"	L L
••	••	74		M	,,	,,	70	11'0"	F	,,	,,	70		
••	;;	80	13'0''	M	,,	,,	$\frac{74}{27}$	12'0''	M	,,	,,	66	9'0"	I I
,,	,,	68 59	10'0''	M	."	••	67	7'0''	F	,,	,,	69	8' 0" 5' 0"	
,,	,,	$\frac{73}{72}$	12'0''	M	8/2	,,	74	4'0''	F	,,	,,	74	5'0''	N
,,	,,	70	2'0''	M	,,	,,	$\frac{72}{2}$	10'0"	F	**	,,	73	9' 0"	Ň
,,	,,	72	9'0"	M	,,	,,	$\overline{72}$	15'0''	M	,,	,,	64	6'0"	Ē
,,	"	68	8'0"	M	,,	,,	$\overline{71}$	3' 0"	\mathbf{F}	,,	,,	76	11'0"	F
,,	,,	71	11'0''	\mathbf{F}	••	,,	76	16'0''	\mathbf{F}	,,	,,	73	9'0"	H
, ,	, ,	67	$5'_{0}0''_{0}$	\mathbf{F}	••	,,	75	8' 0"	F	,,	,,	72	4'0''	Ŋ
, ,	,,	71	5'0''	\mathbf{F}_{\perp}	••	,,	74	4'0''	M	,,	,,	71	13'0''	V
••	,,	66	6'0''	\mathbf{F}	,,	,,	75	6'0''	\mathbf{F}	,,	,,	72	6'0"	F
, ,	••	72	7'0''	\mathbf{F}	,,	,,	73	4'0''	\mathbf{F}	,,	,,	76	10'0''	N
••	,,	73	9' 0"	M_{\pm}	,,	,,	72	6'0"	\mathbf{F}	,,	,,	78	8' 0"	F
,,	,,	74	11'0''	\mathbf{F}	,,	,,	73	11'0"	\mathbf{F}	,,	,,	74	10'6''	N
,,	,,	74	11'0''	М	,,	,,	74	6'0"	\mathbf{F}	,,	,,	74	13'6''	N
"	;,	77	11'0''	\mathbf{F}	,,	,,	76	8'0"	М	,,	,,	76	15'0''	N
"		72	- 8′0″	М			76	12' 0"	\mathbf{F}	,,		74	19'0"	F
	,,	69	12'0''	М	,,	"	76	4'0"	Μ		"	73	13'0''	М
"	,,	70	15'0''	М	,,	"	68	9' 0"	\mathbf{F}	,,	"	69	3'0''	H
"	,,	70	6' 0"	F .	,,	"	73	13' 0"	M	,,	"	69	4'0''	F
·/2	,,	70	14' 0"	F	,,	"	73	5' 0"	M	10/2	"	76	2'0''	F
	"	70	9' 0"	F	,,	"	70	11'0"	M	/ 2	"	70	3' 0"	F
,,	"	75	14'0''	$\mathbf{\tilde{F}}$,,	"	69	8'0"	F	,,	,,	71	1'6″	N
••	**	72	5'0''	M	,,	"	69	8'0"	F	,,	"	73	$\tilde{1}'\tilde{6}''$	F
"	"	71	8' 0"	M	,,	"	$\overline{72}$	13' 0"	M	,,	,,	73	$-\tilde{6}'\tilde{0}''$	N
"	"	70	6' 0"	\mathbf{M}^{\parallel}	,,	"	$\overline{76}$	5' 0"	M	"	,,	76	5' 0"	F
; ,	,,	63	6′ 0″	\mathbf{F}	,,	,,	72	9'0"	M	,,	"	68	2'6''	Ā
"	"	70	14' 0"	M	,,	,,	$\frac{12}{75}$	11'0"	F	,,	"	78	$\frac{5}{5'0''}$	N
"	,,	70	8'0"	M	,,	,,	$\overline{76}$	3' 0"	M	,,	"	71	6' 0"	F
••	"	77	3' 0"	M	,,	"	$\frac{10}{72}$	6'0"	F	"	"	71	9'0"	Ē
,,	"	72	8'0"	M I	••	"	$\overline{75}$	2'0"	M	"	"	68	9'0"	N
••	,,	71	3'0"	M	"	"	70	10'0"	M	"	"	76	8'0"	F
••	,,	66	5'0''	\mathbf{F}	••	,,	72	8'0"	\mathbf{F}	,,	"	74	6'0 "	Ē
"	,,	65	$-\frac{3}{9'}\frac{0}{0''}$	г F	,,	,,	$\frac{72}{70}$	$\frac{80}{6'0''}$	F	,,	,,	74 77	15'0"	F
"	"		9 0 6' 0"	· · · · · · · · · · · · · · · · · · ·	"	"		6'0"		••	,,		6'0 "	г М
••	,,	71	6'0"	F	,,	"	71	~ ~ /	F	"	"	69	(9'0"	N
••	,,	74	~ ~	M	,,	,,	71	9'0''	M	,,	,,	77	19 [°] 0″	
,,	,,	74	13'0''	F	,,	,,	74	12'0''	F	77	"		19.0.	N
,,	"	73	9'0''	M	,,	,,	74	8'0"	F	••	,,	75	8'0"	M
,,	,,	76	12'0"	M	,,	,,	77	10'0"	M	,,	,,	$\frac{65}{50}$	6'0''	F
,,	,,	71	14'0"	F	,,	,,	77	6'0"	M	,,	,,	72	3'0''	M
,,	,,	68	8'0"	M	"	,,	75	13' 0"	M	,,	,,	79	11'0"	F
,,	,,	74	11'0"	F	,,	,,	70	11'6"	F	"	,,	72	10' 0"	F
"	,,	75	15'0"	\mathbf{F}	,,	,,	78	12'0"	F	"	,,	71	10' 0"	F
		75	10' 0"	\mathbf{F}	,,		62	3' 0"	\mathbf{F}	,,	,,	70	1'6''	A

Table No.9.—Fin-whale foetuses (cont.).

Date when	Lei	ngth.	Sex.	Da wh		Ler	ngth.	Sex.	Da who		Ler	ngth.	Se
measured.	Mother.	Foetus.	DEA.	meas		Mother.	Foetus.	BEX.	measu		Mother.	Foetus.	100
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
¹⁰ / ₂ 40	67	2'0''	F	12/2	40	78	3'0''	F	$^{14}/_{2}$	40	74	6'0"	M
	73	10'0"	M			75	14'0"	M			$\overline{72}$	4'0''	M
·· ··	80	Ĩ′ Õ″	F	"	"	$\frac{10}{72}$	12'0"	F	••	"	73	11'0"	M
·· ··	70	$\hat{6}'\check{0}''$	M	,,	"	$\overline{73}$	10'0"	F	••	,,	70	7' 0"	M
·· ··	70	5'0''	M	,,	"	72	5'11''	M	,,	,,	67	5'0"	M
,, ,,	69	5'0''	M	13/2	"	76	9'0''	M	,,	,,	73	4'0"	M
,, ,,	68	9′ 0″	M	/2	••	73	10' 0"	M	,,	,,	75	10'0''	N
·· ··	70	5'0''	F	,,	,,	66	5'0''	F	,,	,,	72	10 0 6'0"	F
** **	70	11'0''	M	,,	"		14'0''	M	"	,,	$\overline{72}$	9′0″	$ \tilde{N}$
** **	70	8'0"	M	"	,,	77	8'0"	F	,,	,,	$\frac{72}{73}$	12'0''	F
·· ··				**	,,	74			,,	,,		12 0	F F
,, ,,	73	12'0''	F	,,	"	70	2'0''	F	15/	,,	67	10'0'' 15'0''	F F
·· ··	73	6'0''	M	,,	,,	70	12'0''	M	$^{15}/_{2}$,,	$\frac{74}{7}$		
,, ,,	73	14'0''	M	,,	,,		12'0''	F	,,	,,	75	15'0''	$ \mathbf{F}_{V} $
,, ,,	75	8'0"	M	,,	,,	62	13'0''	M	,,	,,	75	11'0''	
,, ,,	74	10'0''	\mathbf{F}	**	,,	71	13'0''	M	,,	,,	73	5'0"	M
,, ,,	76	6'0"	\mathbf{F}	,,	,,	70	12'0''	F	,,	,,	70	6'0"	N
,, ,,	78	13'0''	\mathbf{F}	,,	,,	73	2'0''	\mathbf{F}	,,	,,	75	11'0''	M
, , ,,	77	6' 0''	\mathbf{F}	,,	"	71	12'0''	\mathbf{F}	,,	,,	73	14'0''	F
	68	3'0''	M	,,	,,	72	4'0''	Μ	,,	,,	69	8' 0"	N
$\frac{11}{2}$ ",	75	15'0''	$ \mathbf{F} $,,	,,	69	5' 0''	F	,,	,,	70	5'0''	N
,, ,,	74	2'0''	F	,,	"	75	4'0''	M	,,	,,	72	15'0''	N
,, ,,	71	5'0''	\mathbf{F}	,,	,,	70	10'0"	Μ	,,	,,	76	3'0''	\mathbb{N}
	69	13'0''	M			73	2'0''	Μ			70	7'0''	F
,, ,,	70	12'0''	\mathbf{F}	"	"	71	8'0"	Μ	"	••	73	15'0''	M
,, ,,	$\overline{75}$	10'0''	M	"	"	71	6' 0"	F	,,	"	70	5'0''	F
·· ··	$\overrightarrow{75}$	6'0"	M	"	,,	$\overline{72}$	14'0''	M	,,	"	68	3' 0"	F
·· ··	76	8' 0″	\mathbf{F}	"	,,	73	16'0"	M	,,	**	73	12'0''	F
·· ··	68	$\frac{3}{4'0''}$	F	,,	**	72	9'0"	F	"	"	75	9'0"	N
** **	72	<u>*</u> 0″	F	"	"	73	4'0″	F	,,	••	73	$\frac{3}{4'}0''$	F
,, ,,	74	10'0"	F	,,	,,	$\frac{73}{72}$	$\frac{4}{1'6''}$	F	,,	••	73	11'0''	$\mathbf{\bar{F}}$
** **		$\frac{10}{6'0''}$		"	••				,,	,,		16'0"	F
,, ,,	70		M	,,	,,	71	15'0''	M	,,	,,	76	10 0 8'0"	\mathbf{F}
,, ,,	66	10'0"	M	,,	,,	66	7'0"	M	,,	,,	78		
» »	72	14'0''	M	- ??,	,,	76	9'6"	\mathbf{M}	,,	,,	71	5'0''	N
,, ,,	73	9'0"	M	$\frac{14}{2}$,,	73	10'0''	\mathbf{F}	,,	,,	68	6'0"	M
,, ,,	74	6' 0"	M	,,	,,	73	10' 0 "	\mathbf{F}	,,	,,	68	10' 0"	F
,, ,,	74	12'0''	\mathbf{F}	,,	,,	73	7'0''	\mathbf{F}	,,	,,	73	12'0''	N
,, ,,	75	11'6''	\mathbf{F}	,,	,,	79	7'0''	Μ	,,	,,	75	9' 0"	M
·· ··	73	8' 0"	\mathbf{F}	,,	,,	73	3' 0''	M	,,	,,	70	4'0''	N
$\frac{12}{2}$, ,	73	11'0''	M	,,	,,	69	5'0''	\mathbf{F}	,,	,,	73	13'0''	N
» »	72	4'0''	M	,,	,,	66	4'0''	M	,,	,,	73	18'0''	F
,, ,,	76	11'0''	M	,,	,,	74	10'0"	\mathbf{F}	,,	,,	74	7'0''	N
,, ,,	74	5'0''	\mathbf{F}	,,	,,	69	11'0"	F	,,	,,	75	1'0''	N
,, ,,	72	5'0''	M	,,	,,	71	4'0''	M	,,	,,	76	5'0''	F
,, ,,	77	13'0''	\mathbf{F}	,,	,,	76	9'0"	\mathbf{F}	,,	,,	76	8' 0''	N
	72	8' 0"	M			70	8' 0"	M			77	14'0''	N
., .,	75	9' 0"	F	,,	,,	75	5'0''	М	"	,,	73	14'0''	M
·· ··	$\overrightarrow{69}$	5'0''	$\mathbf{\hat{F}}$	"	,,	75	11'0"	M	,,	"	77	12' 0"	F
·· ··	69	7' 0"	M	,,	,,	66	8'0"	M	,,	,,	78	9′ 0″	F
""	$\frac{05}{75}$	9' 0"	M	,,	"	71	5'0''	F	,,	,,	69	3' 0"	N
""	63	$\frac{3}{7'0''}$	M	,,	,,	69	$\frac{5}{2'}\frac{0''}{0''}$	M	,,	,,	77	6'0"	F
", "	73	10'0"	F	**	••	70	ã' 0"	M	,,	,,	70	5'0"	F
""				,,	,,				,,	,,	1 1	50 9'0"	F
,, ,,	71	10'0''	F	,,	,,	75	7'0''	F	,,	,,	$69 \\ 67$		5
,, ,,	71	10'0''	F	,,	,,		8'0"	F	1.27	,,	67	10'9"	$\left \underbrace{\mathbb{N}}_{\mathbf{E}} \right $
,, ,,	75	5'0"	F	,,	,,	72	12'0''	F	16/2	,,	71	9'0"	F
·· ··	76	10' 0"	F	,,	,,	69	3' 0"	F	,,	,,	75	8'0"	M
,, ,,	78	8'0"	Μ	,,	,,	73	11'0''	\mathbf{F}	,,	,,	73	9' 0"	N
,, ,,	77	11'6''	\mathbf{F}	,,	"	78	7'0''	\mathbf{F}	,,	,,	72	12'0''	N
	75	11'0''	\mathbf{F}			73	8' 0"	M	• /		70	10'0''	\mathbb{N}

 $Table \ No. \ 9. - Fin-whale \ foetuses ({\rm cont.}).$

Dat		Lei	ngth.	Gam	Da		Lei	ngth.	Sor	Dat		Ler	ngth.	Sex
whe meast		Mother.	Foetus.	Sex.	who meast		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft	
$^{16'}$, 2	40	72	7'0''	M	$\frac{17}{2}$	40	71	14'0"	M	20/2	40	64	12'0''	\mathbf{F}
,,	,,	75	14'0''	M	,,	,,	72	14'0"	\mathbf{F}	,,	,,	70	15'0''	\mathbf{F}
.,	;,	74	8′ 0″	M	,,	,,	65	2 ′ 0″	F	,,	,,	77	14'0''	$ \mathbf{F} $
••	;,	78	16'0''	F	,,	,,	73	15'0"	\mathbf{F}		,,	71	14'0''	\mathbf{F}
·,	;,	74	12'0''	M	,,	,,	75	5'0''	\mathbf{F}	$21''_{12}$,,	74	14'0''	M
,,	••	77	5'0''	M	,,	,,	75	8´0″	\mathbf{F}	,,	,,	70	3'0''	\mathbf{F}
••	,,	75	3' 0''	\mathbf{F}	,,	,,	78	10' 0"	M	,,	,,	73	12'0''	\mathbf{F}
,,	,,	75	13'0''	M	,,	,,	$\overline{78}$	10'0"	Μ	,,	,,	72	8'0"	M
••	,,	71	2'0''	M	,,	,,	75	3' 0''	F	,,	,,	75	16'0"	M
;,	,,	71	13'0''	F	,,	,,	69	12'0''	M		,,	73	3'0"	M
••	,,	68	8' 0"	M	,,	,,	68	2' 0''	F	$\frac{22}{2}$,,	74	12'0''	M
••	,,	72	12'0''	M	,,	,,	69	9'0''	M	,,	,,	73	9'0''	M
••	••	$\frac{64}{72}$	10'0''	F	,,	,,	75	11'0''	M F	,,	,,	70	13'0''	F
••	••	$73 \\ 75$	$\frac{13'0''}{12'0''}$	M	,,	,,	74	10'0''	T . :	,,	••	$\frac{71}{72}$	14'0''	M
••	,,	$\begin{array}{c} 75 \\ 71 \end{array}$	13′ 0″ 11′ 0″	M M	,,	,,	72 71	$2'0'' \\ 14'0''$	\mathbf{F}	,,	••	$\begin{bmatrix} 73 \\ 76 \end{bmatrix}$	14′ 0″ 10′ 0″	M M
,,	,,	$\frac{71}{72}$	7'0''	M	,,	,,	$\begin{array}{c c} 74\\73\end{array}$	14 0	F	· ,,	,,	77	10'0'' 13'0''	M
••	,,	71	16'0"	F	,,	**	73	10'0''	M	,,	••	78	13'0'' 14'0''	M
••	,,	72	$\frac{10}{3'0''}$	F	,,	,,	70	5'0''	M	•,	,,	75	14'0'' 15'0''	F
"	"	71	7 ′ 0″	$\mathbf{\tilde{F}}$,,	"	71	11'0"	M	**	"	69	10^{10}	M
••	••	73	12'0"	M	,,	,,	74	6'0"	M	,,	"	69	$\frac{1}{6'0''}$	F
••	,,	69	$\frac{15}{5'0''}$	M	,,	,,	78	11'0"	F	,,	••	76	9′ 0″	M
**	"	72	4'0"	$\mathbf{\hat{F}}$,,	"	73	10' 0"	$ \tilde{\mathbf{F}} $,,	••	69	15'0''	F
,,	,,	73	13'0''	$\mathbf{\hat{F}}$,,	"	71	8'0"	M	••	,,	70	10'0"	F
,, 	"	69	Ĩ′ Ŏ″	Ē	"	••	68	8' Ŭ″	M	,,	,,	68	13' 0"	F
:,	,,	73	13'0''	F	,,	"	73	7' 0 "	F	,,	"	71	3'0"	M
,, ,,	,, ,,	68	12'0''	M	18/2	"	$\overline{73}$	7' 0"	F	,, ,,	,, 	$\overline{72}$	3' 0"	M
,,	••	72	14'0''	F	,,	" "	65	8' 0"	F	,,	,, ,,	68	8'0"	\mathbf{F}
••	••	76	7'0''	M	,,	,,	76	7'0''	M	,,	,,	77	14'0''	M
••	••	70	7'0''	F	,,	,,	71	7'0''	M		,,	70	5'0''	M
,,	,,	70	8' 0"	M	,,	,,	78	6'0''	M	23/2	,,	73	9' 0"	\mathbf{F}
,.	,,	74	3'0''	M	,,	,,	69	5'0''	M	,,	,,	77	-9'0''	F
,,	,,	72	6'0''	M	,,	,,	74	14'0''	\mathbf{F}	,,	,,	70	9'0''	M
,,	,,	72	6'0''	M	,,	,,	72	8'0''	M	,,	,,	73	2'6''	$ \mathbf{F} $
,,	,,	77	$11'_{0''}$	M	,,	,,	75	14'0''	\mathbf{F}	,,	,,	71	10' 0"	$ \mathbf{F} $
;,	,,	73	5'0''	F	,,	,,	74	9' 0 <i>"</i>	Μ	,,	,,	71	12'0''	$ \mathbf{F} $
,,	,,	74	12'0''	F	,,	,,	73	8'0"	M	,,	,,	74	11'0"	M
;,	,,	$\frac{74}{72}$	15'0''	M	,,	,,	73 - 73	12'0''	M	,,	,,	70	8'0"	M
,,	;;	79 79	10'0''	M	,,	,,	73	10'0''	F	,,	,,	78	2'0''	M
•,	,,	$\frac{78}{77}$	16'0'' 16'0''	M	,,	,,	$\frac{73}{72}$	5'0'' 11'0''	M	,,	,,	74	14'0''	F
••	••	$\begin{array}{c} 77 \\ 72 \end{array}$	$rac{16'0''}{6'0''}$	\mathbf{F} \mathbf{F}	,,	,,	73		M	,,	,,	77	6′ 0″ 10′ 0″	F M
••	,,	$\frac{72}{72}$	11'0''	M M	19/2	,,	$rac{64}{72}$	$rac{4'3''}{2'0''}$	M M	,,	,,	$\begin{array}{c} 73 \\ 71 \end{array}$	10'0'' 12'0''	F
••	;;	$\frac{12}{72}$	$\frac{11}{6'0''}$	F		••	$\frac{72}{75}$	14'0''	F	,,	,,	70	12'0'' 14'0''	F
••	,,	$\frac{12}{72}$	12'0''	\mathbf{F}	,,	,,		14 0 11'0''	F	,,	••	70 72	14'0''	F
;,	;,	74	$\frac{12}{6'}\frac{0}{0''}$	\mathbf{F}	,,	"	75	${11 0' \\ 12' 0''$	M	,,	,,	$\frac{12}{75}$	5'0''	M
,, 	"	74	12'4''	M			67	8'0"	F	,,	,,	75	10' 0"	M
17/2	,,	72	12'0''	F	,,	"	68	8'0"	F	,,	,,	73	10'0'' 14'0''	M
	"	$\overline{74}$	7' 0"	$\mathbf{\hat{F}}$	"	"	73	2'0''	M	,,	·,	74	10'0"	F
,, 	,, ,,	$\overline{75}$	10' 0"	M	"	"	70	8 '0"	F	,,	·,	67	10'0"	Ē
,, ,,	,, ,,	73	4'0"	M	,,	"	72	13' 0"	F	"	·,	75	13' 0"	M
,,	" "	75	8' 0"	F	», ••	"	71	16'0"	$\mathbf{\tilde{F}}$	24/2	,, 	73	13' 0 "	F
,,	,,	71	10'0"	\mathbf{F}	,, ,,	,, ,,	68	10' 0"	Μ		", 	76	15'0''	M
;,	,,	77	14' 0"	\mathbf{F}	20/2	" "	73	2'0''	M	" "	,, ,,	75	14'0"	M
.,	,,	76	14'0"	М	,,	,, ,,	77	8' 0"	м	,, ,,	,, ,,	62	5' 0"	F
••	,,	73	3' 0"	\mathbf{F}	,,	"	74	5'0''	Μ	,,	,, ,,	72	7'0''	M
,,	"	69	6' 0"	F	,,	,,	75	6'0"	Μ	,,	,,	72	12'0''	\mathbf{F}
		74	13' 0"	M				17'0''					13'0''	

Table No. 9.—Fin-whale foetuses (cont.).

Date when	Lei	ngth.	Sex.	Da wh		Len	gth.	Sex.	Da who		Ler	igth.	Sex.
measured.	Mother.	Foetus.	Joek.	meas		Mother.	Foetus.		measu		Mother.	Foetus.	
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
$^{24}/_{2}$ 40	74	14'0"	F	25/3	40	67	7' 0"	Μ	$\frac{27}{2}$	40	72	4'0''	Μ
,, ,,	70	12'0"	M	,,	,,	74	4'0''	F	,,	,,	73	15'0''	M
» "	77	11'0"	M	,,	,,	74	3'0''	M	,,	,,	71	$\frac{11'0''}{14'0''}$	F
,, ,,	74	8'0'' 15'0''	F F	,,	,,	71	12'0'' 16'0''	F	,,	,,	$\begin{array}{c} 73 \\ 73 \end{array}$	$rac{14'0''}{5'0''}$	\mathbf{M}
", ",	$\begin{array}{c} 75\\76\end{array}$	15 0'' 5'0"	M	,,	,,	$\begin{array}{c c} 74 \\ 69 \end{array}$	$\frac{16}{5'0''}$	$ \begin{array}{c} M \\ F \end{array} $,,	,,	73	5'0''	M
,, ,,	77	11'0"	F	,,	,,	67	10' 0"	r M	,,	••	72	12'0''	M
,, ,,	66	7'0"	M	,,	,,	73	10''' 14'' 5''	F	"	,,	73^{12}	12'0'' 16'0''	F
·· ··	71	10'0"	M	,,	,,	67	$\hat{6}' 6''$	M	**	"	75	8' 0"	F
·· ··	72	4' 0"	F	**	,,	70	16'7''	\mathbf{F}	"	,,	67	7' 0"	F
·· ·· ·· ··	69	6' 0"	F	26/2	,, ,,	75	3'0''	F	,, ,,	" "	71	12' 0"	F
,, ,,	73	11'0"	F	,,	,,	74	2'6''	Μ	,,	,,	74	10'0"	\mathbf{F}
,, ,,	73	6' 0"	Μ	,,	"	73	.17'0''	M	,,	,,	76	9'0"	M
	72	∫12′0″	Μ	,,	,,	68	6' 0''	Μ	,,	,,	79	13'0''	F
" "		(14'0'')	M	,,	,,	72	12'0''	Μ	,,	,,	70	13'0"	M
,, ,,	72	6'0"	M	,,	,,	75	15'0''	F	,,	,,	73	5'0''	M
,, ,,	74	16'0"	M	,,	,,	74	10'0''	F	,,	,,	69	7'6"	F
» »	75	13'0"	F	,,	,,	71	15'0''	F	,,	,,		7'0"	F
,, ,,	$\begin{bmatrix} 76 \\ 71 \end{bmatrix}$	14′ 0″ 14′ 6″	F F	,,	,,	69 74	$2'0'' \ 16'0''$	F	,,	,,	65	$9' 0'' \\ 13' 0''$	F F
,, ,,	71	140 7'0''	F F	"	,,	74 69	16 0''	\mathbf{F} \mathbf{F}	,,	,,		$\frac{13}{4'5''}$	F
,, ,,	75	14'0"	M	•••	,,	$\begin{array}{c} 68 \\ 74 \end{array}$	11'0"	г F	,,	"	$\begin{array}{c c} 66\\ 68\end{array}$	4 5 4'0"	F
,, ,,	70	$\frac{14}{4'0''}$	M	,,	,,	74	11 0 8'0"	$\mathbf{\tilde{F}}$,,	,,	70	16'0''	M
2 ⁵ / ₂ ,,	66	6'0''	F	"	"	74	14'0''	M	28/2	••	71	10'0''	M
	73	15' 0"	F	,,	,,	71	$\frac{110}{7'0''}$	F		"	70	5'0''	F
** **	74	10'0"	M	,,	,,	73	5' 0"	M	,,	,,	71	9'0"	M
" " " "	73	8' 0"	Μ	**	,,	75	9′ Õ″	F	"	,, ,,	74	7' 0"	F
,, ,, ,, ,,	74	10' 0"	M	>> >>	" "	71	5'0''	\mathbf{F}	,, ,,	,,	65	9' 0"	M
,, ,,	72	7' 0"	$ \mathbf{F} $;;	,,	73	10' 0"	M	,,	,,	68	10'0"	\mathbf{F}
,, ,,	70	10' 0"	M	,,	,,	75	10' 0"	M	,,	,,	67	8'0"	\mathbf{F}
,, ,,	71	8'0"	M	,,	,,	69	9' 0"	F	,,	· ,,	67	11'0"	F
·· ··	74	3'0''	M	,,	,,	70	11'0''	M	,,	,,	72	7'0"	F
,, ,,	72	14'0''	M	,,	,,	70	7'0''	M	,,	,,	72	17'0"	M
,, ,,	76	5'0"	M	,,	,,	71	12'0''	F	,,	,,	65	6'0"	M
,, ,,	68	8'0"	M	,,	,,	73	9'0"	F	,,	,,		15'0"	F
,, ,,	76	5' 6'' 5' 0''	M	,,	,,	74	9'0"	M	,,	,,	66	$4'0'' \\ 3'0''$	M M
", "	$\begin{array}{ c c } 75 \\ 72 \end{array}$	5'6''	$ \begin{array}{c} M \\ F \end{array} $,,	,,	$\frac{76}{78}$	$14'0'' \\ 12'0''$	\mathbf{F} \mathbf{F}	,,	"	$\begin{array}{ c c } 75\\ 74\end{array}$	30 14'0"	M
** **	67	8'0"	F	,,	,,	$\begin{array}{c} 78 \\ 72 \end{array}$	12'0'' 18'0''	M	,,	,,	69	7'0''	M
,, ,,	-	12'0	$ \mathbf{\tilde{F}} $,,	,,		6'0''	F	"	,,	70	10'0"	M
", "	70	11'0"	M	"	"	72	10'0"	M	,,	"	74	10'0''	M
	71	9'0"	F	,,	,,	$\frac{12}{74}$	6'0"	M	,,	,, 	75	13'0"	M
·· ·· ··	62	6'0"	F	,, ,,	,, ,,	65	4'3''	M	" "	,, ,,	76	9'0"	F
,, ,,	64	8' 0"	M		,, ,,	66	10'0"	F	,,	,,	77	15'0''	Μ
,, ,,	72	5'0"	\mathbf{F}	27/2	,,	71	0' 6"	M	,,	,,	72	14'0"	\mathbf{F}
·· ··	68	10' 0"	F	,,	,,	69	8' 0"	M	,,	,,	75	6' 0"	F
·· ··	75	12'0"	F	,,	,,	71	8'0"	M	,,	,,	75	3' 0"	M
·, ·,		8'0"	M	,,	,,		15'0''	M	,,	,,	76	14'0''	M
" "	70	4'0''	F	,,	,,	75	14'0''	M	29/2	"		7'6"	\mathbf{M} \mathbf{F}
·· ··	74	3'0'' 8'0''	F	,,	,,	73	7'0'' 11'0''	M	20/2	,,	68	7'0'' 10'0''	F
,, ,,	80 76	12'0''	M F	,,	,,	$\begin{array}{ c c } 72\\ 69 \end{array}$	10'0''	F M	. "	,,	$\begin{array}{ c c } 71 \\ 73 \end{array}$	10'0"	F F
,, ,,	70	$\frac{12}{4'0''}$	г М	,,	,,	69 71	$10 \ 0''$ $12' \ 0''$	M	,,	••	73	7'0"	F
,, ,,	1	f 9'0"	M	,,	,,	67	$\frac{12}{7'0''}$	F	,,	,,	71	7'0"	F
", "	73	8'0"	M	,,	,,	69	2'0"	M	,,	,,	70	14'0"	F
·· ··	75	5'0"	F	"	"	67	$\frac{1}{7'0''}$	F	"	"	72	10'0"	M
,, ,, ,, ,,	71	2'0''	M	,, ,,	"	64	5' 0"	M	**	,, ,,	73	14'0"	M
·· ··	70	14'0"	\mathbf{F}	,,	,, ,,	$\overline{72}$	14' 0"	M	**	" "	73	6' 0 "	M
•• ••		•	•	., 77	,,		•		. ,,	77		•	•

Table No. 9.—Fin-whale foetuses (cont.).

 $Table \ No. \ 9. \\ --Fin-whale \ foetuses \ (cont.).$

Date when		Lei	ngth.	Sex.	Da wh		Ler	igth.	Sex.	Da wh		Ler	ngth.	Sex
measur		Mother.	Foetus.		meas		Mother.	Foetus.	Joca.	meas		Mother.	Foetus.	SCA.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
29 / / 2	40	$\begin{array}{c} 75\\70\end{array}$	$\frac{9'0''}{4'0''}$	F F	$\frac{2}{13}$	40	$\frac{71}{70}$	$\frac{7'0''}{7'0''}$	M	⁵ /3	40	69	10'0"	F
••	,,	70	$\frac{4}{11'0''}$	F	,,	,,	$\begin{array}{c} 79 \\ 68 \end{array}$	7'0' 7'0"	\mathbf{M} \mathbf{F}	,,	,,	74	$2'0'' \\ 1'0''$	M
••	,,	67	5'6''	F	,,	"	08 71	16'0"	M	••	••	$\begin{array}{c c} 70\\72\end{array}$	10' 17' 0''	M M
., .,	,, ,,	$\overline{76}$	4'0"	$\hat{\mathbf{F}}$,,	••	76	10'0"	M	••	••	70	17'0'' 12'0''	F
., ,,	,, ,,	73	14'0"	F	,, 	,,	69	$10 \ 0''$	M	••	••	73	10'0''	F
**	··	-76	15'0''	M	,, 	;,	71	$\frac{1}{9'}$ $\frac{0}{0''}$	M	••	••	71	8'0"	Â
,,	••	76	8' 0 ″	M	3/3	,, ,,	71	2'6''	F	,, ,,	,, ,,	74	2'0''	Μ
••	,,	74	4'0''	Μ	,,	,,	69	8' 0"	M	,,	,,	71	5' 0"	Μ
,,	,,	$\frac{66}{52}$	8' 0"	Μ	,,	,,	76	13'0''	M	,,	,,	71	15'0''	Μ
,,	,,	$\frac{72}{72}$	7'0"	M	,,	,,	$\overline{76}$	11'0''	\mathbf{F}	,,	,,	73	11'0''	Μ
,,	,,	77	4'0''	M	,,	,,	77	10'0"	M	,,	,,	68	14'0''	\mathbf{F}
"	"	$\frac{76}{75}$	$\frac{10'0''}{6'0''}$	F	,,	,,	75	$17'_{0''}$	F	,,	,,	69	6'0"	F
	"	$\frac{15}{75}$	14'0''	M M	,,	"	$\begin{array}{c} 74 \\ 75 \end{array}$	$5'0'' \ 7'0''$	M	,,	"	71	14'0''	M
	"	$\frac{73}{78}$	$14 0 \\ 10'0''$	\mathbf{F}	,,	,,	$\frac{75}{74}$	13'0''	${f M}{f F}$,,	,,	71	7'0'' 8'0''	F
	••	73	$\frac{10}{7'0''}$	F	,,	••	68^{74}	$\frac{13}{9'0''}$	M	,,	"	$\begin{array}{c} 70 \\ 72 \end{array}$	$\frac{8'0'}{16'0''}$	M M
	"	72	7'6''	$\mathbf{\tilde{F}}$	••	;;	65	$\frac{3}{4'}\frac{0}{0''}$	M	6/3	••	77	16 0 17'0''	M
	., ,,	64	5'9''	М	,,	••	72	14'0''	M		,,	72	14'0''	F
	,,	69	9' 4''	\mathbf{F}	••	,, 	$\overline{72}$	17' 0"	M	,,	"	$\frac{1}{72}$	13'0"	M
	,,	66	7'8''	М	"" "	,, ,,	73	12'0''	M	"	••	64	8' 0"	M
1	,,	73	13'0"	\mathbf{F}		,, ,,	75	12'0''	М	,, ,,	,, ,,	$\overline{73}$	6'0"	F
	,,	76	13'0''	Μ	$\frac{1}{4}\frac{1}{3}$,,	73	3' 0 "	\mathbf{F}	,,	••	73	15'0''	M
	,,	74	14'0''	\mathbf{M}	,,	,,	74	18'0"	\mathbf{F}	,,	,,	74	14'0''	M
,,	,,	72	12'0''	M	,,	,,	74	2'0''	\mathbf{F}	,,	,,	76	13'0''	\mathbf{F}
,,	"	$\frac{74}{72}$	15'0''	M	,,	,,	$\frac{72}{72}$	15'0"	M	,,	,,	72	6' 0"	M
,,	,,	$\frac{72}{75}$	10'0''	F	,,	,,	73	9'0''	M	,,	,,	70	15'0"	M
,,	"	$\frac{75}{76}$	$rac{14'0''}{7'0''}$	F M	,,	"	80 66	17'0"	M	,,	,,	$\frac{72}{70}$	12'0''	M
	"	$\frac{76}{75}$	10'0"	M	,,	,,	$\begin{array}{c} 66 \\ 73 \end{array}$	$rac{10'0''}{5'0''}$	M	,,	,,	70	15'0''	M. F
	"	72	10'0'' 14'0''	M	"	,,	$\frac{73}{74}$	12'0''	M M	,,	,,	73	${14'0'' \\ 14'0''}$	r F
	"	$6\overline{9}$	8'0"	M	"	,,	74	$\frac{12}{2'0''}$	F			73	15'0''	M
	;;	69	4′0″	F	••	**	72	10'0''	\mathbf{F}	,,	, ,	73	$\frac{13}{9'0''}$	M
	·· /	67	4′0″	$\widetilde{\mathbf{M}}$	·· ··	**	$\overline{73}$	15'0"	M	,,	,,	76	1'6''	\mathbf{F}
		73	14'0''	\mathbf{F}	;,	,, ,,	74	12'0"	F	,, 	,, 	76	14'0''	F
	,,	76	4'0''	\mathbf{M}_{\pm}	,,	,,	68	- 9' 0 "	Μ	7]3	,, ,,	68	3' 0"	M
••	,,	70	9' 0"	\mathbf{M}		,,	71	13' 0"	\mathbf{F}	,,	,,	72	2'0''	Μ
,,	,,	73	6'0"	\mathbf{F}	5? / 3	,,	74	12'0''	\mathbf{F}	,,	,,	74	9'0''	\mathbf{F}
;,	,,	74	14'0''	F	,,	,,	$\frac{73}{72}$	8'0"	F	,,	,,	73	6'0''	M
	,,	$\begin{array}{c c}74\\70\end{array}$	$rac{14'0''}{13'0''}$	F F	,,	,,	72 60	15'0''	F	,,	"	80	$\frac{13'0''}{15'0''}$	M
	"	70	$\frac{13}{6'0''}$	M	"	"	$\begin{array}{c} 69 \\ 70 \end{array}$	$\begin{vmatrix} 9' 0'' \\ 12' 0'' \end{vmatrix}$	$\mathbf{F} \mid \mathbf{M}$,,	"	76	$15'0'' \\ 17'0''$	\mathbf{F} \mathbf{F}
	"	$\frac{72}{72}$	7' 0"	M	,,	,,	65	$\frac{12}{15'0''}$	F	,,	,,	$\begin{array}{c} 74 \\ 76 \end{array}$	17'0'' 13'0''	F M
	"	74	8'0"	M	,,	"	69	$\frac{15}{6'0''}$	г F	,,	,,		13'0 [14'0"	\mathbf{F}
	" "	75	12'0"	F	"	"	$\frac{03}{72}$	13'0"	F	,,	,,	70	14'0''	M
,,	,,	76	8' 0 "	$\mathbf{\tilde{M}}$,, 	"		14'0"	$\mathbf{\tilde{F}}$			67	8'0"	\mathbf{F}
,,	,,	76	13' 0"	\mathbf{F}	" "	,, ,,	76	2' 6''	F	,, .,	,, 	72	10' 6"	ÎТ.
	,,	77	12' 0"	\mathbf{F}	;;	,,	74	8'0"	\mathbf{F}	,, ,,	,, ,,	72	12'6''	\mathbf{F}
	,,	71	13'0"	\mathbf{F}	,,	,,	63	7' 0"	М	" "	" "	74	12'0"	\mathbf{F}
	,,	$\frac{72}{2}$	13' 0"	Μ	••	-,	66	4' 0"	\mathbf{F}	,,	,,	75	11'0"	\mathbf{F}
	,,	77	9'0"	Μ	,,	,,	70	13' 0"	\mathbf{M}		,,	72	8' 0"	\mathbf{F}
2 /	,,	73	15'0"	F	, ,	,,	74	2'0"	Μ	8/3	,,	70	6' 0"	Μ
;,	,,	72	16'0''	M	••	,,	71	10' 0"	М	••	,,	75	11'0"	M
,,	,,	72	$\frac{13'0''}{5'0''}$	F	••	,,	66	8'0"	M	"	••	66	10'0''	F
,,	"	67 66	7' 0" 10' 0"	F	,,	,,	71	5'0''	M	••	,,	$\frac{69}{71}$	9' 0"	M
	"	$\begin{array}{c c}66\\70\end{array}$	$\frac{10'0''}{3'0''}$	$\mathbf{M} = \mathbf{F}$	"	"	70	12'0''	M	,,	,,	71	4'0''	M
	"	70	3 0 11′0″	г F	••	"	$\left \begin{array}{c} 76 \\ 75 \end{array} \right $	$\begin{array}{c c} 14'0'' \\ 8'0'' \end{array}$	F M	,,	"	$\frac{75}{77}$	19' 0" 18' 0"	M F
,,	,, I	• 4	TLO	r	,,	,, I	10	00	INT	,,	, ,	11	19.0	\mathbf{r}

Date when	Lei	ngth.	Sex.	Date when	Lei	ngth.	Sex.	Date when	Lei	ngth.	Sex.
measured.	Mother.	Foetus.	JOA.	measured.	Mother.	Foetus.	JULA.	measured.	Mother.	Foetus.	DUX.
<pre>8/3 40 '' '' '' '' '' '' '' '' '' '' '' '' '' '' ''</pre>	Engl. ft. 69 71 72 74 74 74 76 77 78 72 75 66 70	Engl. ft. 4' 0" 7' 0" 15' 0" 7' 0" 6' 0" 12' 0" 14' 0" 16' 0" 10' 0" 9' 0" 12' 0" 6' 0" 21' 0"	F F F F M M F M M F M M M	⁹ / ₃ 40 ¹⁰ / ₃ ", ¹¹ / ₃ ", ¹¹ / ₃ ", ¹² / ₃ ", ¹³ / ₂ ", ¹³ / ₃ ",	Engl. ft. 72 77 68 73 67 69 68 70 79 77 75 75 72 73		M M M F M F F F F F F F	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Engl. ft. 75 69 72 77 72 75 77 67 72 75 74 75	Engl. ft. 19' 0" 14' 0" 17' 0" 18' 0" 15' 0" 11' 0" 18' 0" 5' 0" 17' 0" 17' 0" 6' 0" 15' 0"	M F F M M F F M M F M M F M
>> >> >> >> >> >> >>	$ \begin{array}{c} 70 \\ 62 \\ 70 \\ 71 \end{array} $	$ \begin{array}{c} 21 & 0 \\ 8' & 0'' \\ 12' & 0'' \\ 7' & 0'' \end{array} $	M M M F	>> >> >> >> >> >>	$ \begin{array}{c} 73 \\ 72 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	M F F M	,, ,, ,, ,,	73	13'0" 13'0"	M

Table No. 9.—Fin-whale foetuses (cont.).

", ", |71| |7'0" | F ||", ", |72| |11'0" | M || | | Total 2,062 fin-whale foetuses, of which 1,100 males and 961 females. Sex was not stated for 1 foetus. Of 2,061 foetuses, for which sex was stated 53.37 per cent were males and 46.63 per cent females.

Date when	Le	ngth.	Sex.	Date when	Ler	ngth.	Sex.	Date when	Len	gth.	Sex.
measured.	Mother.	Foetus.	Jea.	measured.	Mother.	Foetus.	BCA.	measured.	Mother.	Foetus.	Dex.
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$\frac{30}{10} / \frac{40}{2} , , , , , , , , , , , $	$54 \\ 52 \\ 52 \\ 52 \\ 54$	10' 0" 4' 0" 8' 0"	F M F	$\frac{8}{3}$ 40	53 51	$\begin{cases} 7' 0'' \\ 8' 0'' \\ 12' 0'' \\ 10' 0'' \end{cases}$	M M F	$\begin{array}{cccc} & {}^{23}/_{3} & 40 \\ & {}^{,*}_{20}/_{3} & {}^{,*}_{,*} \\ & {}^{20}/_{3} & {}^{,*}_{,*} \end{array}$	$53 \\ 54 \\ 54 \\ 54 \\ 54$	6'0'' 9'0'' 11'0''	F M F
¹⁶ / ₂ ", Total	54 49	5′0″ 8′0″ -whale_t	F M	11/3 ,	$\begin{vmatrix} 50\\48\\ \text{visb} & 9\\ n \end{vmatrix}$	$\begin{vmatrix} 10' 0'' \\ 6' 0'' \end{vmatrix}$		26/3,, 26/3,	$\begin{vmatrix} 54\\51 \end{vmatrix}$	$\begin{array}{c c} 10' 0'' \\ 7' 0'' \\ \end{array}$	M M

3. Sei-whale foetuses measured in the Southern Seas in the season 1939/40.

Total 15 sei-whale foetuses, of which 9 males and 6 females, or 60 per cent males and 40 per cent females.

	4. Fi	n-whale foetuse	es		
measured at	Humboldt E	Bay, California	in the	summer	1940.
	Date	Length.			

Date	Trei	igun.	
when measured.	Mother.	Foetus.	Sex.
$\frac{22}{7}$, 40 $\frac{30}{7}$,	Engl. ft. 70 66	Engl. ft. 6' 10" 5' 3"	M F

5. Humpback foetuses measured at Humboldt Bay, California in the summer 1940.

Date when	Lei	ngth.	Sex.	Dat whe		Lei	ngth.	Sex.	Dat		Ler	ngth.	Sex.
measured.	Mother.	Foetus.	Sex.	measu		Mother.	Foetus.	bex.	measu		Mother.	Foetus.	Sex.
	Engl. ft.	Ū.				Engl. ft.	Engl.ft.				Engl. ft.	0	
$\frac{16}{7}$ 40	$\begin{array}{c} 47 \\ 45 \end{array}$	$3'0'' \ 1'6''$	F M	$\begin{vmatrix} \frac{23}{7} \\ \frac{6}{8} \end{vmatrix}$	40 .,	$\begin{array}{c} 40\\ 47\end{array}$	${3'3''\over4'2''}$	F M	$\frac{9}{8}$ 7/9	40 "	$\begin{array}{c} 50\\ 48\end{array}$	$4' 2'' \\ 10' 6''$	\mathbf{M} \mathbf{F}
		mpback females.	foet	uses, o	of w	hich 3	males a	nd 3	fema	les, d	or 50 pe	r cent n	nales

Table No. 10.—Size of pregnant whale females caught in the season 1939/40 and summer 1940.

a. Antarctic.

Bluc-whale females.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. fect. 70 71 72 73 74 75 76 77 78 79 80 81 82	$\begin{vmatrix} 3 \\ 3 \\ 3 \\ 6 \\ 9 \\ 16 \\ 26 \\ 20 \\ 36 \\ 57 \\ 71 \\ 61 \end{vmatrix}$	93 94 95	$\begin{array}{c} 84\\ 91\\ 84\\ 69\\ 67\\ 47\\ 32\\ 24\\ 8\\ 3\\ 4\\ 2\end{array}$	Number of foetuses mea- sured
83	92	Total	921	

Fin-whale females.

Length of methers.	Number of pregnant animals,	Length of mothers.	Number of pregnant animals.	Number of foetuses mea-
Engl. reet. 56 59 60 61 62 63 64 65 66 67 68 69 70	$ \begin{array}{r} 1 \\ 2 \\ 2 \\ 2 \\ 7 \\ 10 \\ 24 \\ 39 \\ 54 \\ 68 \\ 95 \\ 127 \\ 200 \\ \end{array} $	Engl. feet. 71 72 73 74 75 76 77 78 79 80 81 Total	$ \begin{array}{r} 196 \\ 242 \\ 257 \\ 226 \\ 216 \\ 126 \\ 79 \\ 45 \\ 16 \\ 9 \\ 1 \\ 2.044 \end{array} $	sured

Sei-whale females.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet. 48 49 50	1 1 1	Engl. feet. 53 54	2 5	Number of foetuses measured 15 of which twin-pairs 1
51 52	$2 \\ 2$	Total	14	

Length of mothers.	Number of pregnant animals.	Number of foetuses measured
Engl. feet. 66 70	$\frac{1}{1}$	Total number of fin-whale females measured 3, of which pregnant 2, or 66.67 per cent.
Total	2	
#.1 	and the second secon	Humpback females.
40 45 47 48 50	1 1 2 1 1	Number of foetuses measured 6 Total number of humpback females measured 9, of which pregnant 6, or 66.67 per cent.
Total	6	

b. Humboldt Bay, California summer 1940.

Fin-whale females.

Table No. 11.—Whale foetuses measured in the season 1939/40 and summer 1940, by species and groups of size in each month.

a. Antarctic.

Blue-whale foetuses.

Groups of size.	Nov.	Dec.	Jan.	Febr.	March.	Total.
Engl. feet.						
Less than 1'	-	_		-		
l'— l' 11"		3		-		3
2'— $2'11''$	1	11	5	1		18
3' 3' 11"	1	28	9	4	-	42
$4' - 4' 11'' \dots$	1	26	19	7	2	55
$5' - 5' 11'' \dots$		62	21	12		95
$6' - 6' 11'' \dots	_	53	28	8	2	91
$7'$ — $7' 11'' \dots	-	-03	37	18	1	106
8′— 8′ 11″	-	18	33	20	2	73
9′— 9′ 11″	-	18	27	34	2	81
10′—10′ 11″	-	24	29	26	5	84
11′—11′ 11″	-	14	12	19	1	46
12'-12'11''	-	3	18	27	2	50
13'-13'11''	-	3	14	20	2	39
14'-14'11''	-	3	20	20	9	52
15'-15'11''	-	1	8	9	2	20
16'-16'11''	-		5	16	5	26
17′—17′ 11″	-	1	3	6	1	11
18′—18′ 11″	-	-	2	10	1	13
19′—19′ 11″	-	-	2	3	1	6
20′-20′ 11″	-		1	5	-	6
21'-21'11''		-	-	3	1	4
23'-23' 11"	-		-	2	-	2
$24' - 24' 11'' \dots$	-	-	-	-	1	1
$2 / -25' 11'' \dots$	-	-	-	1	-	1
Total blue-whale foetuses	3	318	293	271	40	925
Average size of foetuses	3′	6'5''	8'10"	11' 3"	12' 8''	8' 10"

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Table No. 11- (continued).

Groups of size.	Nov.	Dec.	Jan.	Febr.	March.	Total.
Engl. feet.						
Less than 1'	_	1		1		2
1'-1'11''	2	$1\hat{9}$	21	$\hat{\overline{8}}$	2	$5\overline{2}$
$2' - 2' 11'' \dots$	3	45	41	27	8	124
3' - 3' 11''	2	39	45	36	4	126
4' 4' 11"	1	63	57	50	8	179
$5' - 5' 11'' \dots$	_	64	108	78	4	254
$6' - 6' 11'' \dots$	- !	29	67	76	12	184
$7' - 7' 11'' \dots$	_	27	66	63	12	168
8′— 8′ 11″	-	25	82	85	14	206
9' 9' 11"	-	10	61	75	12	158
10′—10′ 11″	_	6	59	88	14	167
11′—11′ 11″	_		26	53	7	86
12'-12' 11"	_	_	21	67	19	107
13′—13′ 11″	-		6	43	18	67
14'14' 11"	- !	-	2	61	23	86
15'-15'11''	- 1	_ 1	2	28	19	49
16′—16′ 11″		_	_	16	7	23
17'-17' 11"			_	5	9	14
18′—18′ 11″			_	2	4	6
19′19′ 11″		-	_	1	2	3
21′21′ 11″		-		-	1	1
Total fin-whale foetuses		328	664	863	199	2,062
Average size of foetuses		$\frac{328}{4'7''}$	6' 6''		10'9"	2,002 7'6''

Fin-whale foetuses.

Sei-whale foetuses.

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

b. Humboldt Bay, California summer 1940. Fin-whale foetuses.

Groups of size.	July.
Engl. feet.	
5'-5' 11''	1 1
Total fin-whale foetuses	$2 \over 5' 6''$

Humpback	foetuses.
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Groups of size.	July.	Aug.	Sept.	Total.
Engl. feet.				
$\begin{array}{c} 1' - 1' 11'' \dots \\ 3' - 3' 11'' \dots \\ 4' - 4' 11'' \dots \\ 10' - 10' 11'' \dots \end{array}$	$\frac{1}{2}$	2 	- - 1	$\begin{array}{c}1\\2\\2\\1\end{array}$
Total humpback foetuses Average size of foetuses	$3 \over 2' 4''$	$2 \\ 4'$	1 10'	${6\atop4'2''}$

Table No. 12.—Whale foetuses, by species and sex, in each month in the season 1939/40.

Kind of foctuses and months.	Num	nber of	Sex not	Total	Number of
Kind of foetuses and months.	Males.	Females.	stated.	foetuses.	males per 10 females.
Blue-whale foetuses.					
November	1	2		3	50
December	156	162	-	318	96
January	157	136	-	293	115
February	124	147	-	271	84
March	15	25	-	40	60
Total	453	472		925	96
Fin-whale foetuses.					
November	3	5	-	8	60
December	172	155	1	328	111
January	378	286	-	664	132
February	436	427	-	863	102
March	111	88	-	199	126
Total	1,100	961	1	2,062	114
Sei-whale foetuses.					
January		1		1	-
February	2	$\frac{1}{2}$	-	4	100
March	$\overline{7}$	3	-	10	233
Total	9	6		15	150

Antarctic.

			Species	of whales	caught				Е	xpedition	ıs.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}^1}$			
South Georgia	7	747		88	26	_	868	44,498	1	_	5
Antarctic,								ŕ			
pelagic whaling	4,936	7,084	2,675	22	778	_	15,495	1,055,510	-	11	88
Coast of Africa:											
Coast of Natal	6	193	79	5	476	-	759	26,638	1		5
Atlantic and Arctic:											
Azores	-			-	-	,	-	8,358			-
Coast of Portugal	_	-		-	-	²) 76	76	6 9 J			
Coast of Norway ³)	1	6		49	5	-	61	?	-	No. 14	-
Pacific North:-				_						_	
Pelagic whaling	40	367	6	7	156	4) 3	579	23,822	-	1	7
California		7	16		1	-	24	683	1	_	2
Coast of Peru		-		-	1,914		1,914	41,359	-	1	8
New Zealand	1	-	80	-	-	-	81	2,689	1	-	
Coast of Japan and											
Corea	26	360	40	623	1,298		2,349	28,084	⁵)		49
Coast of Kamtchatka	9	254	7	11	194	⁶) 68	543	18,235	-	1	3
Total	5,026	9,018	2,903	805	4,848	574	$23,\!174$	$1,\!250,\!575$	4	14	167

Table No. 1.-Whaling in 1940/41 and summer 1941.

1 ton = 1,016 kg.
 No specification.
 During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.
 Right-whales.
 No information of the number of shore stations in operation.
 2 Minke-whales, 57 grey-whales, 5 bottlenoses and 4 dolphines.

Table No. 2.-British whaling in 1940/41 and summer 1941.

			Species o	f whale	s caught				E	xpedition	IS.
Geographical areas.	Geographical areas. Blue.	Fin.	Hump- back.	Sei.	Sperm.		Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers
								$\begin{array}{l} \text{Barrel} = \\ {}^{1/6} \text{ ton.} \end{array}$			
Antarctic, pelagic whaling	627	2,483		1	5	_	3,116	229,780	_	2	16
Coast of Natal	6	193		5	476		759	26,638	1	-	10
New Zealand	1	-	80	-			81	2,689	1	_	
Total	634	2,676	159	6	481		3,956	259,107	2	2	21

Table No. 3.--Norwegian whaling in 1940/41 and summer 1941.

			Species	of whales	e cought				Е	xpedition	15.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
Antarctic.								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}} =$			
pelagic whaling	1,095	89 0	281	12	109	-	2,387	203,317		3	21
Coast of Norway 1)	1	6	-	49	5	-	61	?	-	-	-
Coast of Peru		-			1,914		1,914	41,359		1	8
Total	1,096	896	281	61	2,028	-	4,362	244,676		4	2 9

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

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Countries.	Species of whales caught.								Expeditions.		
	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{l} \operatorname{Barrel} = \\ {}^{1}/_{6} \ \operatorname{ton} \end{array}$			
British Empire.	634	2,676	159	6	481	-	3,956	259,107	2	2	21
Norway ¹)	1,096	896	281	61	2,028	-	1 960			4	29
Japan	3,280	4,438	2,44 0	639			5 12,920	674,319	3) -	7	107
Argentine	7	747		88	26		- 868	44,498	1		5
Portugal	-				_	4) 50]	501	9,057	_		
United States	-	7	16	PROF	1		- 24	683	1		2
Sovjet Russia	9	254	7	11	194	⁵) 68	543	18,235	-	1	3
Total	5,026	9,018	2,903	805	4,848	574	23,174	1,250,575	4	14	167

Table No. 4.—Whaling results for the various countries in 1940/41 and summer 1941.

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food. ²) Right-whales. ³) No information of the number of shore stations in operation. ⁴) No specification. ⁵) 2 Minke-whales, 57 grey-whales, 5 bottlenoses and 4 dolphines.

Table No. 5.—Average size of whales caught in the Southern Seas 1940/41.

Geographical areas.		Average size.				
Number of whales measured.	Company.	Males.	Females.	Total animals.		
A. Blue-whales.		Engl. feet.	Engl. feet.	Engl. feet.		
$\left.\begin{array}{c} Antarctic, \ pelagic \ whaling \ldots \ldots \\ Males 519 \\ Females 576 \end{array}\right\} \ {\rm Total} \ 1,095.$	No. 1 ,, 2 ,, 3	$76.37 \\ 74.72 \\ 75.45$	80.07 79.87 80.10	78.53 77.55 77.54		
Average		75.59	80.03	77.92		
B. Fin-whales.		22.10				
Antarctic, pelagic whaling Males 455 Females 425 } Total 880.	No. 1 ,, 2 ,, 3	$\begin{array}{r} 66.40 \\ 66.52 \\ 64.24 \end{array}$	$70.40 \\ 68.33 \\ 67.54$	68.11 67.4 3 65.85		
Average		64.75	67.88	66.26		
C. Humpbacks.						
Antarctic, pelagic whaling Males 93 Females 186 } Total 279.	No. 1 ,, 2 ,, 3	$\begin{array}{r} 40.28 \\ 41.05 \\ 41.25 \end{array}$	$\begin{array}{r} {\bf 43.47} \\ {\bf 43.00} \\ {\bf 42.58} \end{array}$	$\begin{array}{r} 42.48 \\ 42.25 \\ 42.21 \end{array}$		
Average		40.75	43.15	42.35		
D. Sperm-whales.						
Antarctic, pelagic whaling Males 109.	No. 1 ,, 2 ,, 3	53.81 53.75 50.42				
Average		51.71	-			

Table No. 6.—Whales caught in the season 1940/41 and summer 1941, by species, sex, and size.

a. Antarctic, pelagic whaling.

Blue-whales.

Engl. feet.	Number of		Total		Number of		Total
	Males.	Females.	animals.	Engl. feet.	Males.	Females.	animals.
63	3	3	6	84	12	40	52
64		-	-	85	9	26	35
65	7	6 8	13	86	6	25	31
66	15		23	87	2	36	38
67	15	10	25	88		18	18
68	14	8	22	89	-	17	17
69	21	13	34	90	-	28	28
70	36	25	61	91		12	$egin{array}{c} 12 \\ 8 \\ 5 \\ 3 \end{array}$
71	3 0	20	50	92	_	8	8
72	25	16	41	93		5	5
73	25	23	48	91	1	2	3
74	26	23	49	95		1	1
75	30	16	46	Sum	519	576	1,095
76	38	23	61	Sum	515	010	1,035
77	30	20	50		()		
78	28	24	52			Iales:	75.59 feet
79	34	10	44	Averag	ge size {]	Temales:	80.03 "
80	30	25	55		(J	otal anima	ls: 77.92 "
81	32	22	54		, f N	Iales: 47.	40
82	26	31	57	Per Per	$r \operatorname{cent} \left\{ \begin{array}{c} \mathbf{H} \\ \mathbf{F} \end{array} \right\}$	Iales: 47. 'emales: 52.	60
83	24	32	56		(-		

Fin-whales.

Engl. feet.	Number of		Total		Number of		Total
	Males.	Females.	animals.	Engl. feet.	Males.	Females.	animals.
51	1		1	71	13	32	45
52	1	$1 \\ 3$	$\begin{array}{c}2\\5\\2\\10\end{array}$	72	12	40	52
53	$2 \\ 2 \\ 7$	3	5	73	6	26	32
54	2	3	2	74	1	24	25
55	-		10	75	-	16	16
56	10	10	20	76	-	11	11
57	18	5 7 5	23	77	-	8	8
58 50	11	7	18	78		4 3	4 3
59	12		17	79	-	3	3
60	26	19	45	80	_	-	_
61	18	15	33	81	-	1	1
62	20	10	30	Sum	455	425	880
63	29_{22}	21	50				
64	35	21	56		1 1	fales:	64.75 feet
65	4 6	22	<u>68</u>	Arrona		Temales:	67 99
66	37	23	60	Averag	, size j 1	otal anima	1a. 66.96 "
67	37	18	55		(I	otal amma	us: 00.20 "
68 60	38	21	59	Dos	$\operatorname{cent}\left\{ \begin{array}{l} M\\ T \end{array} \right\}$	Iales: 51	.70
<u>69</u>	43	23	66		F Cent j F	'emales: 48	.30
70	30	33	63		`		

	Number of		Total		Number of		Total
Engl. feet.	Males.	Females.	animals.	Engl. feet.	Males.	Females.	animals.
33 34 35 36 37 38 39	$\begin{array}{c} - \\ 1 \\ 7 \\ 4 \\ 10 \\ 14 \end{array}$	$ \begin{array}{c} 1 \\ 2 \\ 1 \\ 4 \\ 9 \\ 6 \\ 9 \\ 9 \end{array} $	1 2 2 11 13 16 23	47 48 49 50 51 52 Sum	3 1 - - - - 93	$ \begin{array}{r} 18\\ 6\\ 5\\ 7\\ 1\\ 1\\ 186\\ \end{array} $	$ \begin{array}{r} 21 \\ 7 \\ 5 \\ 7 \\ 1 \\ 1 \\ 279 \\ \end{array} $
$\begin{array}{c} 40 \\ 41 \\ 42 \\ 43 \\ 44 \\ 45 \\ 46 \end{array}$	$ \begin{array}{r} 10 \\ 10 \\ 11 \\ 10 \\ 6 \\ 2 \\ 4 \end{array} $	$ \begin{array}{r} 11 \\ 14 \\ 20 \\ 18 \\ 22 \\ 20 \\ 11 \end{array} $	21 24 31 28 28 28 22 15	Averag	$ge size \begin{cases} M \\ F \\ T \end{cases}$	fales: 'emales: 'otal anima	$\begin{array}{c} 40.75 \text{ feet} \\ 43.15 \\ , \\ \text{sls: } 42.35 \\ , \\ 33 \end{array}$

Humpbacks.

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.	Engl. feet.	Number of males.
36 39 42	1 1 1	48 49 50	$\begin{array}{c} 4\\ 6\\ 6\end{array}$	56 57 58	$egin{array}{c} 6 \ 5 \ 2 \end{array}$
$\begin{array}{c} 43\\ 44\\ 45\end{array}$	4 1 1	$\begin{array}{c} 51 \\ 52 \\ 53 \end{array}$	$\begin{array}{c} 8\\12\\17\end{array}$	Sum	109
$\begin{array}{c} 45\\ 46\\ 47\end{array}$	$\begin{array}{c} 1\\2\\4\end{array}$	53 54 55		Average size:— Males: 51.71 feet.	

b. Coast of Peru 1941. Sperm-whales.

	Number of		Total		Number of		Total
Engl. feet. Ma	Males.	Females.	animals.	Engl. feet.	Males.	Females.	animals.
21		1	1	43	48	_	48
22	1	_	1	44	56	-	56
23	$\overline{2}$	-	$\tilde{2}$	$\overline{45}$	50	-	50
24	$\frac{2}{1}$	2	$\frac{2}{3}$	$\overline{46}$	34	_	34
25	6	27	33	47	31	_	31
2 6	8	14	22	48	25	_	25
27	14	20	34	49	17	-	17
28	11	23	34	50	29	-	29
29	17	50	67	51	18	-	18
30	27	79	106	52	13	-	13
31	25	98	123	53	12		12
32	29	104	133	54	13	-	13
33	30	91	121	56	1	-	1
34	45	113	158	Sum	1,078	835	1,913
35	60	101	161	Sum	1,078	000	1,915
36	54	49	103		()	r 1	00 == ()
37	61	33	94			lales:	39.77 feet
38	58	17	75	Averag		emales:	32.33 ,,
39	57	12	69		(T)	otal anima	ls: 36.52 ,,
40	84	1	85		, (M	lales: 56	.35
41	73	-	73	Per Per	$\operatorname{cent} \left\{ \begin{array}{c} \mathbf{m} \\ \mathbf{F} \end{array} \right\}$	emales: 43	.65
42	68	-	68		ι-		

Fin-	wha	les.
------	-----	------

Engl. feet.	Animals.	Engl. feet.	Animals.
57 58	1 1	67 71	1 1
$\begin{array}{c} 61 \\ 64 \end{array}$	$\frac{1}{2}$	Sum	7

7 animals of which 4 males and 3 females. Average size of animals 63.14 feet.

Engl. feet.	Animals.	Engl. feet.	Males.	
36	2	42	2	
37	1	44	3	
38	2	45	2	
40	2			
41	1	Sum	15	

Humpbacks.

16 humpbacks caught of which 11 males and 5 females. 1 humpback not measured.

Average size of animals 40.80 feet.

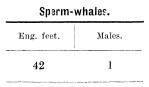


Table No. 7.-Whales caught in the season 1940/41 and 1941, by species, sex and groups of size.

a. Antarctic, pelagic whaling.

Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less) * 2. (71 feet to and incl. 85 feet) * 3. (above 85 feet)	$ 184 \\ 750 \\ 161 \\ 1 095 $	$ \begin{array}{r} 16.80 \\ 68.49 \\ 14.71 \\ 100.00 \end{array} $
Immature males	191 194 385	36.80 33.68 35.16
Mature males	328 382 710	63.20 66.32 64.84

39

F	in	-w	ha	les.
---	----	----	----	------

	Number of whales.	Per cent.
Group 1. (55 feet and less), ,, 2. (56 feet to and incl. 65 feet), ,, 3. (above 65 feet)	20 360 500 880	$2.27 \\ 40.91 \\ 56.82 \\ 100.00$
Immature males, females, , animals		$ 28.13 \\ 28.24 \\ 28.18 $
Mature males, females, animals	$\begin{array}{r} 327 \\ 305 \\ \hline 632 \end{array}$	71.87 71.76 71.82

b. Coast of Peru 1941.

Sperm-whales.

	Mal	es.	Fem	ales.	Total animals.	
	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.
Group 1. (29 feet and less), ,, 2. (30 feet to and incl. 34 feet) ,, 3. (35 feet and above)	156	5.6 14.5 79.9	$137 \\ 485 \\ 213$	$16.4 \\ 58.1 \\ 25.5$	197 641 1.075	$10.3 \\ 33.5 \\ 56.2$
Total	1,078	100.0	835	100.0	1,913	100.0

Table No. 8.—Average production of oil per blue-whale unit in the Antarctic in the season 1940/41.

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 pr	oduction
Geog ra ph ic al areas.	Company.	equivalents.	Total.	Per blue-whale equivalent.
			Barrels ¹)	Barrels 1)
South Georgia	No. 1	395.2	43,098	109.1
Antarctic, pelagic whaling	No. 1 ,, 2 ,, 3 ,, 4 ,, 5	$904.2 \\ 669.7 \\ 964.5 \\ 463.2 \\ 521.5$	115,840 85,043 113,640 53,700 58,636	128.1 127.0 117.8 115.9 112.4
Average				121.2

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

Table No. 9.—Whale foetuses.

I. Blue-whale foetuses

measured in the Southern Seas in the season 1940/41.

Date when		Le	ngth.	Sex.	Date	Lei	ngth.	Sex.	Date when	Lei	Sex.	
measu		Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	Sex.	measured.	Mother.	Foetus.	Sex.
		Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$\frac{19}{11}$	4 0	81	4'0''	F	² / ₁₂ 40	86	5'0"	\mathbf{F}	$^{13}/_{12}$ 40	78	4' 0"	F
20/11		$\overline{76}$	$\frac{1}{3'0''}$	F		86	6'0"	Ē		84	3' 0"	F
	••	90	4'0''	M	,, ,,	76	2'0"	M	$\frac{14}{12}$,	84	7'0"	F
21/11	••	- 80	$\frac{4}{5'}0''$	M	,, ,,	5 C	5'0''	M	/12 ,,		5'0''	F
/ 11	••				,, ,,	81			,, ,,	85		
,,	,,	91	12'0''	F	,,, ,,	84	3'0''	M		86	5'0"	M
	,,	83	9'0"	F	$\frac{3}{12}$ "	87	8'0"	F	15/12 ,	82	4'0''	M
²² /′11	,,	91	3' 0''	M	,, ,,	88	8'0"	\mathbf{F}	16/12 ,,	81	5'0''	M
,,	,,	83	4'0''	\mathbf{F}	,, ,,	91	3' 0"	$ \mathbf{F} $,, ,,	84	2'0''	M
	,,	88	4'0''	\mathbf{F}		87	6' 0"	\mathbf{F}	,, ,,	80	5'0''	M
24/11	,,	87	5'0"	$ \mathbf{F} $	$\frac{4}{12}$ ",	79	1'0"	M	,, ,,	78	5'0''	M
²⁴ // ₁₁ ²⁵ / ₁₁	,,	85	2'0''	M	,, ,,	79	5'0"	M		83	2'0''	M
,,	.,	82	5'0''	F		87	4'0"	Μ	17/	87	$\bar{6}' 0''$	F
.,		86	6' 0"	F	,, ,,	83	4'0"	M		84	13' 0"	M
.,		88	6'0"	F	" "	87	4 '0"	M	18/12 ,	92	7'0''	F
26		80	8'0"	F	⁵ / ₁₂ ",	90	8'0"	F		81	3' 0"	M
11	••	78	3' 0"	M		84	3'0''	F	,, ,,	85	50 6'0"	F
••	••	85	7′0″	M	,, ,,	1	4'0"	F	,, ,,	85	7′0″	M
••	••	84	2'0"	M	·· ··	81	$\frac{4}{5'0''}$	M	·, ·,		6'0"	
••	••	1			$^{6/}_{/12}$,,	92			,, ,,	93		F
**	••	87	5'0"	M	/12 ,,	89	8'0"	F	·, ,,	70	2' 0''	M
••	••	81	2'0''	M	,, ,,	82	4'0"	F	,, ,,	77	5' 0"	F
,,	••	80	5'0"	M	,, ,,	90	10' 0"	F	,, ,,	80	6' 0"	F
	,,	89	2' 0"	M	,, ,,	90	5' 0"	M	19/12 ,,	77	5'0''	Μ
27/11	;,	87	4' 0"	\mathbf{F}	,, ,,	73	6'0"	$ \mathbf{F} $,, ,,	88	5' 0"	M
,,	,,	83	1' 0"	M	7/12 ,,	87	2'0"	M	,, ,,	87	10' 0"	M
,,	,,	80	5' 0"	$ \mathbf{F} $,, ,,	90	3' 0"	M		90	6'0"	\mathbf{F}
28/'11	,,	84	1'0"	\mathbf{F}		95	∫ 6′0″	M	²⁰ / ₁₂ ,,	86	3' 0"	Μ
,,	••	76	4'0''	$ \mathbf{F} $,, ,,	90	j́ 6′ 0″	M	,, ,,	91	15'0"	M
••		82	5' 0"	F			6'0"	M	,, ,,	72	3' 0"	\mathbf{F}
	,,	83	2'0''	M		90	\$ 6'0"	F	1	77	4'0"	F
29/11	,,	88	4' 0"	F	,, ,,		6' 0"	F	,, ,,	87	7'0"	\mathbf{F}
		85	8' 0"	\mathbf{F}		73	2'0"	M	,, ,,	86	5' 0"	F
;,	••	86	6' 0"	M	,, ,,	83	5' 0"	F	21/12 ,,	83	7' 0"	M
;,	••	81	3' 0"	M	,, ,,	86	4'0"	M		85	5'0"	M
30/ 11	"	84	4'0"	M	8/12 ,,	86	7'0"	M	,, ,,	87	5'0"	F
	;;	85	8'0"	F	/12 ,,	90	6'0"	F	,, ,,	84	6'0"	F
••	;,	83	5'0"	M	,, ,,	81	5'0"	F	,, ,,	86	7'0"	M
"	**	83	5'0"	M	,, ,,			r F	,, ,,	80	4'0"	F
,,	,,		3'0"	F	,, ,,	89	3'0''		,, ,,	1	5'0''	F
;,	,,	83	6'0"		,, ,,	87	3 0 ⁴ 8' 0"	M	,, ,,	82	8'0"	F
,,	,,	91		F	,, ,,	81		M	22/ 11	83		
,,	,,	83	4'0"	F	.,, ,,	83	7'0"	M	22/12 ,,	82	5'0"	M
,,	;,	86	5'0"	F	9/12 ,,	86	7'0''	F	,, ,,	87	7'0"	F
		85	∫ 3′0″	F	,, ,,	87	7'0"	F	,, ,,	81	6'0''	F
,,	"		{3 ′ 0″	M	,, ,,	90	6' 0"	\mathbf{F}	·, ·,	84	7'0"	F
¹ / ₁₂	,,	83	8'0"	\mathbf{F}	,, ,,	81	7' 0"	M	,, ,,	78	3' 0"	Μ
,,	,,	79	4' 0"	M		84	10'0"	\mathbf{F}	,, ,,	91	3' 0"	M
,,	,,	86	5' 0"	M	10/12 ,	84	7' 0"	\mathbf{F}	,, ,,	77	3'0"	\mathbf{F}
,,	,,	91	2'0"	M	,, ,,	84	3' 0"	F	,, ,,	63	7'0"	F
;;	••	86	3' 0"	F		82	3' 0"	Ē		88	6' 0"	\mathbf{F}
		87	2' 0"	M	,, ,,	82	7' 0"	M	23/12 ,,	78	3' 0"	F
2/12	••	82	3' 0"	M	,, ,,	88	7' 0"	F		82	4' 0"	M
	**	86	4'0"	M	,, ,,		ſ 6' 0"	M	,, ,,	87	8'0"	F
,,	••	85	4'0"	M	¹¹ / ₁₂ ,	88	6'0"	M	,, ,,	78	3'0"	Ē
••	• • •				/12 ,,	00			,, ,,	F		
,, ,,	••	80	2'0"	\mathbf{F}			6'0"	M	,, ,,	84	6'0"	M

Date when	Ler	ngth.	Sex.	Dat whe		Lei	ngth.	Sex.	Dat		Ler	ngth.	Sex.
measured.	Mother.	Foetus.	sex.	measu		Mother.	Foetus.	Sex.	measu		Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Engl. ft. 84 84 80 84 89 84 82 78 81 84 77 90 80 92 91 86 85 82 87 81 90 91	Engl. rt. 5' 0" 9' 0" 2' 0" 3' 0" 6' 0" 6' 0" 7' 0" 8' 0" 4' 0" 8' 0" 4' 0" 8' 0" 12' 0" 6' 0" 7' 0" 4' 0" 9' 0" 4' 0" 9' 0" 9' 0"	FFMFFMFMFMMMMMMMM FMFMMMMMMMMM F	$\begin{array}{c} 28/12 \\ \vdots \\ 29/12 \\ \vdots \\ 30/12 \\ \vdots \\ 31/12 \\ 1/1 \\ \vdots \\ 2/1 \\ \vdots \\ \vdots \\ 31/12 \\ 1/1 \\ 1/1 \\ 31/12 \\ 1/1 \\ 31/12 \\ 1/1 \\ 31/12 \\ 1/1 \\ 31/12 \\ 1/1 \\ 31/12 \\ 1/1 \\ 31/12 \\ 1/1 \\ 31/12 \\ 31/12 \\ 1/1 \\ 31/12 \\ 3$	40 "	83 75 83 92 81 79 84 88 87 73 86 90 88 77 90 88 77 90 87 91 84 90 87 94	Engl. II. 8'0" 5'0" 8'0" 5'0" 5'0" 5'0" 6'0" 10'0" 1'0" 6'0" 6'0" 9'0" 4'0" 14'0"	FMMFFMFFFMFMMMMFMM FMFFFFFMFFM FMFFMFFMF	7/1 8/1 9/1 10/1 11/1 12/1 13/1	41 ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	Engl. it. 90 80 88 79 85 78 89 85 80 87 74 89 90 90 90 87 90 82 85 89 91 84 90 85	l2'0" 6'0" 12'0" 6'0" 4'0" 3'0" 5'0" 3'0" 12'0" 3'0" 10'0" 3'0" 9'0" 8'0" 9'0" 5'0" 12'0" 5'0" 12'0" 5'0" 12'0" 5'0" 12'0" 5'0" 10'0" 5'0" 3'0" 5'0"	MMMMMFMFFFMFMFFMFFMFFFMF
	91 86 84 92 78	9 0 6' 0" 6' 0" 16' 0" 5' 0"	r M M F F	>> >> >> >> >> >> >>	>> >> >> >> >> >> >>	84 73 89 84 72	9' 0" 3' 0" 2' 0" 6' 0"	Р М F M M	14/1 ,, ,,	>> >> >> >> >> >> >>	89 86 85 85	5'0'' 8'0'' 5'0'' 12'0''	M M F M

Table No. 9.—Blue-whale foetuses (cont.).

Total 240 blue-whale foetuses, of which 122 males and 118 females, or 50.83 per cent males and 49.17 per cent females.

2. Fin-whale foetuses

measured in the Southern Seas in the season 1940/41.

Date when	Ler	ngth.	Sex.	Da whe		Ler	ngth.	Sex.	Date when		Lei	Sex.	
measured.	Mother.	Foetus.	DEA.	measu		Mother.	Foetus.	DCA.	measu		Mother.	Foetus.	DOX.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
¹⁷ / ₁₁ 40	72	3' 0"	F	¹⁴ / ₁₂	4 0	71	6' 0"	M	20/12	40	70	4' 0"	M
¹⁸ /11 ,	68	5'0''	M			71	6' 0"	M	,,	,,	79	8' 0"	M
$\frac{21}{11}$,,	72	4'0''	\mathbf{F}	¹⁵ /12	,,	70	7' 0"	M	²¹ / ₁₂	,,	72	3' 0''	M
.,,, ,,	70	3' 0"	Μ	,,	,,	76	3' 0"	\mathbf{F}	,,	,,	73	5' 0''	Μ
²⁴ / ₁₁ ,,	74	4' 0"	Μ	,,	,,	72	6' 0"	M	22/12	,,	72	1'0''	М
²⁹ /11 ,,	69	5'0''	Μ	,,	,,	77	6' 0"	M	26/12	,,	72	6' 0"	M
³ /12 ,,	75	5'0''	M	¹⁶ / ₁₂	,,	75	7' 0"	\mathbf{F}	,,	,,	62	2'0''	\mathbf{F}
$\frac{4}{12}$,	71	4'0"	F	$\frac{17}{12}$	"	68	3' 0"	Μ	,,	,,	78	6' 0"	\mathbf{F}
⁶ / ₁₂ ,,	74	3'0"	M			74	4' 0"	Μ	,,	,,	69	5'0''	M
,, ,,	$\overline{72}$	3'0"	F	18/12	,,	66	6' 0"	M	27/12	,,	70	3' 0"	F
。"	$75 \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \\$	6'0″	M		,,	74	2'0"	M	,,	,,	75	7' 0"	F
⁸ /12 ,,	72	4'0''	Μ	¹⁹ / ₁₂	,,	74	5' 0"	M	,,	,,	76	4' 0"	\mathbf{F}
9/	73	6′0″	M	,,	,,	68	4'0''	F	,,	,,	72	4' 0"	M
	74	4′0″	F	"	,,	71	6' 0"	F	,,	,,	74	4'0"	M
$\frac{12}{12}$	65 50	2'0"	M		,,	72	5'0"	M	,,	,,	67	3'0"	M
$\frac{14}{12}$,	79	9' 0"	M	$^{20}/_{12}$,,	72	8'0"	\mathbf{F}	,,	"	73	10' 0"	\mathbf{F}

Table No. 9.--Fin-whale foetuses (cont.).

•

, D	ate	Ler	ngth.		Dat		Len	gth.		Dat		Len	gth.	
	nen sured.	Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl.ft.				Engl. ft.	Engl. ft.	
²⁸ /12	4 0	73	3' 0"	M	14/1	41	6 9	6' 0"	\mathbf{F}	19/3	41	70	11'0"	\mathbf{F}
$\frac{30/12}{5/1}$,,	76	4'0''	\mathbf{F}		,,	75	5'0''	M	20/3	,,	73	14'0"	М
5/1	41	73	4'0''	\mathbf{F}	4]/3	,,	72	4' 0"	M	25/	"	69	11'0"	М
,,	,,	72	3' 0''	$ \mathbf{F} $,,	70	10' 0"	M	26/	,,	72	12'0''	\mathbf{F}
,,	,,	73	4'0''	\mathbf{F}	5]/3	,,	73	5'0''	M	27/3	,,	72	8'0"	F
		72	5' 0''	$ \mathbf{F} $,,	,,	70	8' 0"	M	,,	,,	71	7' 0"	\mathbf{F}
6″/1	,,	67	5'0''	$ \mathbf{F} $			71	1' 0"	M	²⁸ /3	,,	66	11'0"	Μ
,,	,,	71	4'0''	M	6"/3	,, ,,	70	3' 0"	F	,,	"	70	8' 0"	\mathbf{F}
,,	,,	77	4'0''	M	,,	,, ,,	68	7' 0"	M	,,	,,	71	2' 0''	Μ
,,	,,	69	6' 0''	F			64	11' 0"	M	29/3	,,	70	9′ 0″	м
,,	,,	73	6'0 "	F	7]/3	"	74	14' 0"	M	,,		67	12' 0"	\mathbf{F}
	,,	72	6'0''	M	1	"	72	3'0"	M	,,	·,	66	11' 0"	\mathbf{M}
"∕′₁	,,	73	2'0''	F	8 ^{''} 3	"	70	12'0"	M		,, 	73	13' 0"	\mathbf{M}
		75	6' 0"	M	9/3	,,	77	6' 0"	M	"	,, 	74	15' 0"	\mathbf{M}
10/1	,,	77	10' 0"	M	10/3	,,	67	5' 0"	M	30/3	,, 	70	11'0"	\mathbf{F}
,,	,,	74	4'0''	M	,,	" "	73	5' 0"	M	,,	,, ,,	65	9' 0"	\mathbf{F}
,,	,,	73	4'0''	F	1		74	6' 0"	F	,,	,,	76	16' 0"	Μ
,,	,,	75	12'0''	Μ	11/3	,, ,,	67	9' 0"	M	,,	,,	66	12' 0"	\mathbf{F}
- ¹¹ / ₁	,,	71	12'0''	F	13/3		66	5' 0"	\mathbf{F}	,,	,,	65	11'0"	\mathbf{F}
,,	,,	71	2' 0''	M	14/3	,, 	72	15'0"	\mathbf{F}	31/3	,,	65	10' 0"	\mathbf{M}
,,	,,	73	7′ 0″	M	,,	,,	68	13' 0"	F	1	,,	70	12' 0"	\mathbf{M}
,,	,,	73	6' 0"	F	1	"	72	15'0"	M	2]/4		74	5' 0"	\mathbf{F}
,,	,,	71	9' 0"	F	,, ,,	,,	72	10' 0"	M	,,	"	65	14' 0"	\mathbf{M}
		71	9'0''	M	15/3	"	74	10'0"	F	11	,, ,,	70	16' 0"	\mathbf{F}
12/1	,,	70	6' 0"	F	16/3	"	71	8'0"	Μ	6"/4		68	14'0"	M
,,	,,	71	4' 0"	M		"	74	15'0"	F	8/4	" "	68	14'0"	\mathbf{M}
,,	,,	73	4'0''	\mathbf{F}	,,	"	71	16'0"	M	1	,,	69	12' 0"	\mathbf{F}
,,	,,	76	8' 0"	F	,,	,,	69	14'0''	Μ	9"/4		64	14' 0"	М
	,,	71	1'0"	M	17]3	,,	71	6' 0"	F		"	72	7' 0"	F
13/1	,,	74	8' 0"	F		**	63	11'0"	M	,,	,,			
14/1	,,	70	7' 0"	F	18/3	,, 	68	9' 0"	M					
	Tot		fin-wha		etuses		which	82 ma	les a	and 57	7 fe	males, c	or 58.99 [°]	\mathbf{per}

cent males and 41.01 per cent females.

]	measured	lin	the So	outh	ern Sea	s in the	sea	son 19	940 /4	E1.		
Dat		Lei	ngth.		Dat		Ler	ngth.		Dat		Lei	ngth.	
whe measu		Mother.	Foetus.	Sex.	whe		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
¹⁹ /11	4 0	44	1'0″	F	¹⁶ / ₁₂	4 0	43	2' 0''	\mathbf{F}	5/1	41	45	3 ′0″	M
	,,	44	1'0"	M	17/12	,,	49	4'0''	M	⁶ /1	,,	42	2'0"	M
23/11	,,	42	1'0"	M	,,		46	1'0''	F	,,	"	43	2'0''	M
		47	1'0"	Μ	¹⁸ / ₁₂	"	43	8'0"	F			42	1'0"	M
²⁵ / ₁₁	,,	46	1'0"	F		,,	39	1'0"	\mathbf{F}	7/1	"	49	1'0"	M
	"	45	Ĩ′ 0″	M	,,	,,	43	Ĩ′ 0″	M		"	46	1'0"	\mathbf{F}
,,	"	48	Ĩ' 6″	F	19/12	,,	44	2'0"	M	9"/1	"	44	$\tilde{2}' \tilde{0}''$	F
28 /	"	45	1'0"	M	/ 12	"	44	$\frac{2}{2'0''}$	M	/1	,,	47	$\frac{1}{2'0''}$	M
20/11 30/	,,	44	0'6"	M	"	**	40	ĩ′0″	M	10/1	"	50	3'0"	M
$\frac{30}{11}$,,				20?	"				- /1	"	46	1'0"	M
$\frac{2}{12}$,,	48	1'0''	M	²⁰ / ₁₂	,,	47	1'0"	M		,,	1		
5/12	,,	42	1'0"	\mathbf{F}	²² / ₁₂	,,	44	4'0"	\mathbf{F}	11/1	,,	45	2'0"	M
⁶ /12	"	50	7'0"	M	,,	,,	51	0'6''	M	,,	,,	41	2' 0"	Μ
,,	,,	45	1'0"	\mathbf{F}	$\frac{23}{12}$,,	50	2' 0''	F	¹² /1	,,	49	3'0"	M
8/12	,,	41	1'0"	\mathbf{F}	01/12	,,	42	1'0"	M		,,	46	2'0"	M
¹⁵ / ₁₂	,,	45	1'0"	F	1/1	41	40	1'0″	F	14/1	,,	44	1'0"	\mathbf{F}
¹⁶ / ₁₂	,,	45	1'0"	F	4/1		50	1'6"	F			43	0'6"	M
		45	2' 0"	F		**	50	1'0"	M	"	"			
"	.,, m.,	•			,,	"					.	, 		
4	Tot		umpbac				wnich	30 mai	es a	na 20	iei	nates, C	Jr 00.00	per
cent r	nales	s and 4	0.00 per	cen	t iema	ues.								

3. Humpback foetuses

measured	\mathbf{in}	\mathbf{the}	Southern	Seas	in	\mathbf{the}	season	1940/41
----------	---------------	----------------	----------	------	---------------------	----------------	--------	---------

	-			1	_		1		1 -		
Date when	Le	ngth.	Sex.	Date when	Len	gth.	Sex.	Date when	Len	gth.	Sex.
measured.	Mother.	Foetus.		measured.	Mother.	Foetus.		measured.	Mother.	Foetus.	
	Engl. ft.	Engl. ft.			Engl. ft.	Eng .ft			Engl. ft.	Engl. ft.	
²⁷ / ₁₀ 41	35	2' 0"	F	²⁷ /11 41	37	6'0"	\mathbf{F}	¹² / ₁₂ 41	38	10' 0"	\mathbf{F}
3/10 ,	35	6′ 0″ 7′ 0″	M	,, ,,	32	10'0"	F	$\frac{14}{12}$,	36	11'0"	M
·· ··	$\frac{36}{35}$	7'0" 6'0"	M M	,, ,,	$\begin{array}{c} 34\\ 34 \end{array}$	8' 0" 10' 0"	M F	»» »»	37 34	12′ 0″ 8′ 0″	M F
** **	36 36	7' 0"	F	,, ,,	34	7' 0"	F	15/12 ,,	36	10'0"	F
⁹ /11 ,,	35	7'0"	M	·· ·· ·· ··	35	9'0"	M	/12 ,,	36	12' 0"	M
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	34	5' 0″	F		38	12'0"	M	,,,,,,	36	11'0"	\mathbf{F}
	34	10' 0"	F	²⁸ / ₁₁ ,,	-31	6'0"	M		35	6′ 0″	\mathbf{F}
·,, ,,	37	7'0''	M	,, ,,	35	12'0"	F	16/12 ,	35	11'0"	M
¹¹ / ₁₁ ,,	$\begin{array}{c} 36 \\ 37 \end{array}$	12'0'' 9'0''	F M	,, ,, 30/	33 35	12'0'' 12'0''	M F	$17'_{12}$,,	37 37	12' 0" 8' 0"	F F
	37	13'0"	M	³⁰ /11 ,,	31	12'0'' 10'0''	M		38	1'0"	F
,, ,, ,, ,,	36	11'0"	F	,, ,,	36	11'0"	F	18/12 ,,	35	8'0"	M
	35	11'0"	M	$1/_{12}$ "	39	10' 0"	M	$^{/12}$,,	34	8' 0"	\mathbf{F}
¹² / ₁₁ "	33	11'0"	F		36	8'0"	\mathbf{F}		35	12' 0"	\mathbf{F}
· · · · · ·	36	11'0"	F	$\frac{2}{12}$	35	10' 0"	F	$\frac{23}{12}$, ,,	31	8'0"	F
$\frac{14}{11},, \frac{14}{11},, \frac{14}{11}$	37 36	13'0'' 12'0''	M F	3/12 ,,	33 35	9'0" 12'0"	F M	27/12 ,,	32 37	9'0" 9'0"	F F
17/11 "	34	11'0''	M	,, ,,	37	$\frac{12}{8'0''}$	F		35	12'0"	M
,, ,, ,, ,,	34	12'0''	F	** **	37	10' 0"	Ē	$\frac{1}{1}$ $\frac{3}{42}$	36	10'0"	F
19/11 "	32	12'0''	\mathbf{F}	·· ·· ··	34	8'0"	F	,, ,, ,,	34	10' 0"	\mathbf{F}
,, ,,	32	10' 0"	M	,, ,,	36	10' 0"	F	,, ,,	37	11'0"	F
20/11 ,	35	10'0''	F	,, ,,	36	14'0"	M	·› ·›	34	10'0"	F
20/11 ,,	$\begin{vmatrix} 35 \\ 35 \end{vmatrix}$	$\begin{vmatrix} 7' 0'' \\ 3' 0'' \end{vmatrix}$	M F	$\frac{4'_{12}}{4'_{12}}$	35 33	$ 10'0'' \\ 11'0''$	M F	»» »»	35 35	12' 0'' 8' 0''	M F
,, ,,	35	11'0"	M	/12 ,,	37	11'0'' 12'0''	M	» » »	34	8'0"	F
,, ,, ,, ,,	37	11'0"	M	·· ·· ··	34	11'0"	F	›› ›› ›› ››	34	7' 0"	F
	34	11'0"	M	·· ··	38	13' 0"	\mathbf{F}	$\frac{2}{1}, , ,$	34	12'0''	\mathbf{F}
$21/_{11}$,,	33	10' 0"	M	,, ,,	38	10'0"	\mathbf{F}	,, ,,	35	9' 0"	M
** **	34	10'0''	F	,, ,,	33	11'0"	M	» »	35	10' 0" 8' 0"	F M
,, ,,	$\begin{array}{c c} 34\\ 34 \end{array}$	10'0'' 12'0''	F M	,, ,,	33 33	2'0'' 1'0''	F F	· · · / ·	$\begin{array}{c} 34\\ 33 \end{array}$	8 0° 11′ 0″	M
** **	34 34	$\frac{12}{8'0''}$	M	** **	33	10'0"	M	/1 ,,	34	9'0"	F
²² / ₁₁ ,	34	9′ 0″	F	** **	35	11'0"	M	›› ›› ›› ››	33	8'0"	M
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	35	8' 0"	M	$\frac{5}{12}, \frac{3}{12}, \frac{3}{12}$	35	8'0"	M	,, ,,	34	8'0"	\mathbf{F}
,, ,,	34	10' 0"	\mathbf{F}	, ,,	35	10' 0"	M		36	10'0"	F
23/ "	37	10'0"	F	8/19	38	10'0''	M	7/1 "	38	12'0''	M F
/11 ,,	34 36	8'0'' 11'0''	F	9/12 ,	38 37	$ \frac{12'0''}{8'0''}$	M F	»» »»	35 34	9'0" 10'0"	M
,, ,,	30	8'0"	M	,, ,,	38	9'0"	F F	11/1 ",	$34 \\ 37$	$\frac{10}{2'0''}$	F
²⁶ / ₁₁ ,,	36	11'0"	F	10/ ₁₂ ,,	36	8'0"	M	~/1 ,,	.		
• • • • • • • •		•		1 1 4 4 5 7 7	-		-				

4. Sperm-whale foetuses measured off the coast of Peru in 1941.

Total 122 sperm-whale foetuses, of which 52 males and 70 females, or $42.62~{\rm per}$ cent males and 57.38 per cent females.

Table No. 10.—Size of pregnant whale females caught in the season 1940/41 and 1941.

a. Antarctic.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.					
Engl. feet.		Engl. feet.						
70	1	-	17	Number of foetuses mea-				
70 72	$\frac{1}{2}$	$85 \\ 86$	17 19	sured 240				
73	$\frac{2}{4}$	80	24	of which twin-pairs 3				
74	1	88	11	,, ,, triples 2				
75	1	89	9	Total number of blue-whale fe-				
76	3	90	20	males measured 576, of which				
77	6	91	11	pregnant animals 233, or 40.45				
78 79	9	92 02	5	per cent. Total number of mature				
80	5 11	93 94	$\frac{1}{2}$	blue-whale females (above 76 feet)				
81	11	94 95		measured 382, of which preg-				
82	13			nant animals 221 , or 57.85 per				
83 84	$\frac{16}{27}$	Total	233	cent.				
		Fin-w	hale females.					
$\begin{array}{c} 62 \\ 63 \end{array}$	1	$\frac{72}{72}$	22	Number of foetuses measured 139				
64 64	$\frac{1}{2}$	73 74	$16 \\ 15$					
65	$\frac{2}{5}$	74 75	15	Total number of fin-whale fe-				
66	5 5	$\frac{10}{76}$	5	Total number of fin-whale males measured 425, of whi pregnant animals 139, or 32.				
67		77	4	pregnant animals 139, or 32.71 per cent. Total number of mature				
68 20	8	78	1	fin-whale females (above 64 feet)				
69 70	$\begin{array}{c} 7\\16\end{array}$	79	2	measured 305, of which pregnant				
70 71	17	Total	139	animals 135, or 44.26 per cent.				
		Hump	back females.	11				
39	٦	47	0	Number of foetuses measured 50				
39 40	$\frac{1}{2}$	$\begin{array}{c} 47 \\ 48 \end{array}$	$3 \\ 2$					
41	$\frac{2}{2}$	49	$\frac{2}{3}$	Total number of humpback fe- males measured 186, of which				
$\overline{42}$	5	50	$\tilde{5}$	pregnant animals 50 or 26.88				
43	5	51	1	per cent. Total number of mature				
44	8			humpback females (above 40 feet)				
$\begin{array}{c} 45\\ 46\end{array}$	8 5	Total	50	measured 143, of which pregnant animals 47 or 32.87 per cent.				
		b. Coast	t of Peru 194	i 11.				
		Sperm-	whale females	•				
31	2	37	17	Number of foetuses measured 122				
32	4	38	9	Total number of sperm-whale				
33	11	39	1	females measured 835, of which				
34 35	$\begin{array}{c c} 30 \\ 29 \\ \hline Total \\ 122 \end{array}$	122	pregnant animals 122 or 14.61 per cent.					
36	19	-		· •				

Table No. 11.—Whale foetuses measured in the season 1940/41 and 1941, by species and groups of size, in each month.

a. Antarctic.

Blue-whale foetuses.

Groups of size.	Nov.	Dec.	Jan.	March.	April.	Total.
Engl. feet.	1					
$1' - 1' 11'' \dots	2	1	1	_	_	4
2'— $2' 11''$	5	10	1	_		16
3′— 3′ 11″	7	21	6		_	34
4′ 4′ 11″	9	18	3		-	30
$5' - 5' 11'' \dots	10	29	5		-	44
$6' - 6' 11'' \dots	4	28	7	-	-	39
$7'$ — $7' 11'' \dots	1	20	2	-	-	23
8′— 8′ 11″	3	15	3	-	-	21
9′— 9′ 11″	1	3	5	-	-	9
10'-10'11''	_	4	3	-	-	7
11′—11′ 11″	-	-		-	<u> </u>	-
12'-12'11''	1	2	4		-	7
13'-13'11''	-	1		-	-	1
14'-14'11''	-	-	2	-	-	2
15'-15'11''	-	1		-	-	1
$16'-16' 11'' \dots	-	1	<u> </u>	-	-	1
17′—17′ 11″	-	-	1	-	-	1
Total blue-whale foetuses	43	154	43	_	_	240
Average size of foetuses	4' 6"	5'7''	7'1″	-	-	5' 8"

Fin-whale foetuses.

Groups of size.	Nov.	Dec.	Jan.	March.	April.	Total.
Engl. feet.						
1′— 1′ 11″	_	1	1	1		3
2'-2'11''	-	2	2	1		5
$3' - 3' 11'' \dots	2	8	1	2	-	13
4'4'11''	2	11	8	1	-	22
5'-5'11''	2	5	3	4	1	15
$6' - 6' 11'' \dots	-	10	7	3		20
7′— 7′ 11″	-	3	2	2	1	8
8′— 8′ 11″	-	2	2	4	-	8
$9' - 9' 11'' \dots \dots \dots$	-	1	2	4	-	7
10'-10'11''	-	1	1	4	-	6
11′—11′ 11″	-	-	-	8		8
12′—12′ 11″	- 1		2	5	1	8
13′—13′ 11″	-	-	-	2	-	2
14′14′ 11″	-	-	-	3	4	7
15′—15′ 11″	-	-		4	-	4
16'-16'11''	-	-	-	2	1	3
Total fin-whale foetuses	6	44	31	50	8	139
Average size of foetuses	4'	4' 10"	5' 9"	9'7″	12'	7'2''

Humpback foetuses.

Groups of size.	Nov.	Dec.	Jan.	Total.
Engl. feet.				
Less than 1'	1	1	1	3
1′— 1′ 11″	8	12	8	28
$2' - 2' 11'' \dots	-	5	7	12
3′— 3′ 11″		-	3	3
4′— 4′ 11″		2		2
7′— 7′ 11″	~	1		1
8′— 8′ 11″		1		1
Total humpback foetuses	9	22	19	50
Average size of foetuses	11″	2'	1' 8"	1' 8″

b. Coast of Peru 1941.

Sperm-whale foetuses.

Groups of size.	Nov.	Dec.	Jan.	Total.
Engl. feet.				
$\begin{array}{c} 1' - 1' 11'' \dots \\ 2' - 2' 11'' \dots \\ 3' - 3' 11'' \dots \\ 4' - 4' 11'' \dots \\ 5' - 5 11'' \dots \\ 6' - 6' 11'' \dots \\ 7' - 7' 11'' \dots \\ 8' - 8' 11'' \dots \\ 9' - 9' 11'' \dots \\ 10' - 10' 11'' \dots \\ 11' - 11' 11'' \dots \end{array}$	$ \begin{bmatrix} - \\ 1 \\ - \\ 1 \\ 4 \\ 6 \\ 5 \\ 3 \\ 11 \\ 11 $	2 1 - 1 2 9 4 11 7	- 1 1 5 3 6 9	$2 \\ 3 \\ 1 \\ - \\ 1 \\ 5 \\ 9 \\ 19 \\ 10 \\ 28 \\ 20$
11 - 11 - 11 - 11 - 12' - 12' - 12' - 11'' - 13' - 13' - 13' - 11'' - 14' -	9 2 -		2 3 - -	20 20 3 1
Total sperm-whale foetuses Average size of foetuses	54 9′ 5″	47 9′ 5″	21 9′ 3″	122 9' 4"

Table No. 12.—Whale foetuses, by species and sex, in each month in the season 1940/41 and 1941.

a. Antarctic.

Kind of foetuses and months.	Nun	ber of	Total	Number of males per 100
Kind of foetuses and months.	Males.	Females.	foetuses.	females.
Blue-whale foetuses.				
November	19	24	43	79
December	78	76	154	103
January	25	18	43	139
${f Total}$	122	118	240	103

Table No. 12 (continued).

Kind of foetuses and months.	Nun	ber of	Total	Number of
Kind of foetuses and months.	Males.	Females.	foetuses.	males per 100 females.
Fin-whale foetuses.				
November	4	2	6	200
December	29	15	44	193
January	13	18	31	72
March	32	18	50	177
Aprıl	4	4	8	100
${f Total}$	82	57	139	144
Humpback foetuses.				
November	6	3	9	200
December	10	12	22	83
January	14	5	19	280
Total	30	20	50	150

b. Coast of Peru 1941.

Kind of foctuses and months.	Num	ber of	Total	Number of males per 100	
Kind of footases and months.	Males.	Females.	foetuses.	females.	
Sperm-whale foetuses.					
November 1941	26	28	54	93	
December 1941	19	28	47	68	
January 1942	7	14	21	50	
Total	52	70	122	74	

			Species of	of whales	equalit				E	xpedition	ıs.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{c} \text{Barrel} = \\ \frac{1}{6} \text{ ton}^1 \end{array}$			
South Georgia	59	1,189	16	52	109		1,425	77,819	2	-	12
Coast of Africa:											
Coast of Natal	2	204	156	13	123	-	498	19,740	1	-	5
Atlantic and Arctic:											
Azores	-		-			²) 583	583		-	-	-
Coast of Portugal	-	-	-		-	²) 23				-	-
Coast of Norway ³)	1	58	1	48	2	-	110	-		-	-
Pacific North:											
California	-	10	12	1	3	-	26	948	1	-	1
Coast of Peru	-	-	-		3,346		3,346	64,500	-	1	8
New Zealand	-		107		2		109	3,909	1		
Total	62	1,461	292	114	3,585	606	6,120	179,986	5	1	26

Table No. I.-Whaling in 1941/42 and summer 1942.

¹) 1 ton = 1,016 kg. ²) No specification. ²) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

Table No. 2.-Norwegian whaling in 1941/42 and summer 1942.

			Species of	of whales		Expeditions.					
Geographical areas.	Blue.	Oil product		production	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.				
								$\begin{array}{l} \text{Barrel} = \\ {}^{1}/_{6} \text{ ton.} \end{array}$			
Coast of Norway ¹).	1	58	1	48	2	_	110	?	-	-	-
Coast of Peru	-			-	3,346		3,346	64,5 00		1	8
Total	1	58	1	48	3,348	_	3,456	64,500	-	1	8

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

Table No. 3.—British whaling in 1941/42 and summer 1942.

			Species of	of whales		Expeditions.					
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Barrel =	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{l} \text{Barrel} = \\ {}^{1/6} \text{ ton.} \end{array}$			
South Georgia Coast of Natal	$19 \\ 2$	$\begin{array}{c} 316 \\ 204 \end{array}$	-	13^{-1}	$\begin{array}{c} 23\\ 123 \end{array}$		$\begin{array}{r} 359 \\ 498 \end{array}$	$17,012 \\ 19,740$		-	6 5
New Zealand	-		107	-	2	-	109	3,909		-	-
Total	21	520	264	13	148	-	966	40,661	3	-	11

			ar	nd sur	nmer	1942.				1	
Countries.			Species of	of whales		Expeditions.					
	Blue.	Fin.	Hump- back.	Sei.			Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{l} \text{Barrel} = \\ \frac{1}{6} \text{ ton.} \end{array}$			
Norway ¹) Argentine	1 40	58 873		$48 \\ 52$			1 000			1	8 6

148

3

3,585 2) 606

²) 606

966

606

6,120

 $\mathbf{26}$

40,661

13,070

179,986

948

3

_

1

5

1

11

_

1

26

Table No. 4.-Whaling results for the various countries in 1941/42

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food. ²) No specification.

13

1

114

Table No. 5.-Average size of whales caught in the Southern Seas 1941/42.

Geographical areas.			Average size.	
Number of whales measured.	Company.	Males.	Females.	Total animals.
	No. 1	Engl. feet. 72.45	Engl. feet. 73.33	Engl. feet. 72.96
B. Fin-whales. South Georgia Males 362 Females 355 } Total 717	No. 1	63.68	65.65	64.65
C. Humpbacks. South Georgia Males 7 Females 5 Total 12	No. 1	41.57	44.60	42.83
D. Sei-whales. South Georgia Males 22 Females 24 Total 46	No. 1	48.91	51.25	50.13
E. Sperm-whales. South Georgia Males 71	No. 1	48.25	-	_

British Empire

United States

.

Total

Portugal

21

62

520

10

1,461

264

12

292

Table No. 6.—Whales caught in the season 1941/42 and summer 1942, by species, sex, and size.

a. South Georgia.

Blue-whales.

	Nun	Number of		
Engl. feet.	males.	females.	animals.	
70 71 72 73 74 75 78 82 83 90	72	$5 \\ 3 \\ 1 \\ 1 \\ 2 \\ 1 \\ - \\ 1 \\ - \\ 1$	12 5 1 1 2 1 1 1 1 1 1 1 1 1	$\begin{array}{llllllllllllllllllllllllllllllllllll$
Sum	11	15	26	

Fin-whales.

	Num	ber of	Total		Num	ber of	Total
Engl. feet.	Engl. feet. animals. animals.	Engl. feet.	males.	females.	animals.		
55 56 57 58 59 60	$ \begin{array}{r} 17 \\ 11 \\ 11 \\ 12 \\ 12 \\ 29 \\ 29 \end{array} $	$ \begin{array}{c c} 15 \\ 6 \\ 6 \\ 15 \\ 12 \\ 25 \end{array} $	$32 \\ 17 \\ 17 \\ 27 \\ 24 \\ 54$	$71 \\ 72 \\ 73 \\ 74 \\ 75 \\ 76$	7 1 3 -	$ \begin{array}{r} 16 \\ 17 \\ 14 \\ 9 \\ 13 \\ 4 \end{array} $	$ \begin{array}{r} 23 \\ 18 \\ 17 \\ 9 \\ 13 \\ 4 \end{array} $
$\begin{array}{c} 61 \\ 62 \\ 63 \end{array}$	$\begin{array}{c} 19\\14\\28\end{array}$	$\begin{array}{c} 19\\14\\15\end{array}$	38 28 43	 Sum	362	<u>3</u> 355	3 717
$63 \\ 64 \\ 65 \\ 66 \\ 67 \\ 68 \\ 69 \\ 70$	$26 \\ 49 \\ 35 \\ 30 \\ 29 \\ 21 \\ 8$	19 26 19 19 25 18 26	45 75 54 49 54 39 3 4	1		es: nales: al animals es: 50.49 nales: 49.51	

Sei-whales.

$\begin{array}{c c} 43\\ 44\\ 46 \end{array}$	_ 1 1	1 -	1 1 1	55 56 Sum		1 1 24	$\begin{array}{ c c }\hline 1\\1\\\hline 46\end{array}$
$ \begin{array}{c} 47 \\ 48 \\ 49 \\ 50 \\ 51 \\ 52 \\ 53 \\ \end{array} $	1 5 6 3 5 -	$egin{array}{c} -&3\\1&2\\5&5\\5&2\end{array}$	1 8 7 5 10 5 2	Average	size $\begin{cases} F \\ T \end{cases}$	ales: emales: otal animals ales: 47.8; emales: 52.1'	

Humpbacks.					
	Num	ber of	Total		
Engl. feet.	males.	females.	animals.		
38	1	-	1		
40 41	1	$-\frac{-}{2}$	$\begin{array}{c}1\\2\\2\\3\end{array}$	$\left\{\begin{array}{ll} \text{Males:} & 41.57 \text{ feet} \\ \text{Average size} \end{array}\right\} \left\{\begin{array}{ll} \text{Males:} & 44.60 \\ \text{Females:} & 44.60 \end{array}\right\},$	
42	$\frac{2}{3}$	-	$\frac{2}{2}$	Total animals: 42.83 "	
43	3	-	3		
46	-		1	Males: 58.33	
47				$Per cent \begin{cases} Males: 58.33 \\ Females: 41.67 \end{cases}$	
48				_	
Sum	7	5	12		

Sperm-whales.

Engl. feet.	Males.	Engl. feet.	Males.	Engl. feet.	Males.
41 42 43 44 45 46 47	$2 \\ 1 \\ 6 \\ 5 \\ 13 \\ 9$	48 49 50 51 52 53 54	7 3 5 1 6 4 4	55 56 57 Sum	$\frac{1}{2}$ 71

Average size: 48.25 feet.

b.	Coast	of	Peru	summer	1942.
Sperm-whales.					

	Num	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
23		3	3	46	28	_	28
$\frac{10}{24}$	3	6	9	47	$\frac{20}{31}$	_	$\frac{1}{31}$
$\tilde{25}$	21	29	50	48	28	1	29
$\overline{26}$	$\overline{24}$	$\frac{1}{23}$	47	49	$\frac{20}{29}$	-	$\overline{29}$
$\overline{27}$	$\overline{41}$	64	105	50	40	-	40
$\frac{1}{28}$	$\overline{29}$	89	118	50	$\frac{10}{22}$	_	$\overline{22}$
29	47	106	153	52	38		22 38 23 25
30	79	225	304	53	23		23
31	100	232	332	54	$\overline{25}$	_	25
32	81	265	346	55	19		$19 \\ 5$
33	84	193	277	56	5	-	5
34	100	213	313	57	1	-	1
35	134	130	264	58	1	-	1
36	94	77	171	Sum	1,627	1,715	3,342
37	78	35	113	<u>Sum</u>	1,047	1,710	5,542
38	87	12	99		()*		05 00 1
39	64	5	69		. <u>M</u> a	iles: males: tal animals	37.82 feet
40	79	6	85	Average	size { Fe	males:	31.70 ,
41	41	1	42		(To	tal animals	3: 34.71 ,,
42	33	-	33		()/	1	0
43	38	-	38	Per	cent { Ma	les: 48.6 males: 51.3	0
44	43	-	43		[Fe	males: 51.3	Z
45	37	-	37				

Fin-whales.				
Engl. feet.	Animals.			
~0	1			
58	1			
60	1			
62	4			
65	4			
Sum	10			

c. Humboldt Bay, California, summer 1942.

52

Engl. feet.	Animals.
$37 \\ 42 \\ 45 \\ 46 \\ 48 \\ 50$	$ \begin{array}{c} 1 \\ 6 \\ 1 \\ 2 \\ 1 \\ 1 \end{array} $
Sum	12

Humpbacks.

10 animals of which 4 males and 6 females. Average size of animals 62.6 feet.

12 animals of which 6 males and 6 females. Average size of animals 43.67 feet.

Sperm-whales.		
Engl. feet.	Males.	
45 47 48		
Sum	3	

Average males 46.67 feet.

Sei-whales.			
Engl. feet.	Females.		
46	1		

Table No. 7.—Whales caught in the season 1941/42 and summer 1942, by species, sex and groups of size.

a. South Georgia.

Blue-whales.

	Number of whales.	Per cent
Group 1. (70 feet and less)	12	46.15
" 2. (71 feet to and incl. 85 feet)	13	50.00
", 3. (above 85 feet)	the second se	3.85
	26	100.00
[mmature males	9	81.82
" females	13	86.67
" animals	22	84.62
Mature males	2	18.18
" females	2	13.33
" animals	4	15.38

Table No. 7 (continued).

	Number of whales.	Per cent
Group 1. (55 feet and less), , 2. (56 feet to and incl. 65 feet), , 3. (above 65 feet)	32 368 317 717	$\begin{array}{r} 4.46 \\ 51.32 \\ 44.22 \\ \hline 100.00 \end{array}$
Immature males "females "animals	$\frac{125}{146}$	$34.53 \\ 41.13 \\ 37.80$
Mature males " females " animals	$\begin{array}{r} 237 \\ 209 \\ \hline 446 \end{array}$	$\frac{65.47}{58.87}$ <u>62.20</u>

Fin-whales.

b. Coast of Peru summer 1942. Snerm-whales

	oper m-whates.										
		Ma	les.	Fem	ales.	Total animals.					
		Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.				
" [•] 2. (3 0) feet and less)) feet to and incl. 34 feet) 5 feet and above)	444	$10.1 \\ 27.3 \\ 62.6$	320 1,128 267	$18.7 \\ 65.7 \\ 15.6$	$\begin{array}{r} 485 \\ 1,572 \\ 1,285 \end{array}$	$14.5 \\ 47.0 \\ 38.5$				
	Total	1,627	100.0	1,715	100.0	3,342	100.0				

Table No. 8.—Average production of oil per blue-whale unit in the Antarctic in the season 1941/42.

		Blue-whale	Oil production.			
Geographical areas.	Company.	equivalents.	Total.	Per blue-whale equivalent.		
South Georgia	No. 1	491.2	Barrels.1) 57,300	116.7		

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

Table No. 9.—Whale foetuses measured in the season 1941/42 and summer 1942. a. South Georgia.

	•	. ooutin t	acoi giui	
	Date when	Len	gth.	Sex.
Blue-whale	measured.	Mother.	Foetus.	Sex.
foetuses.	¹⁹ / ₃ 42	Engl. feet. 90	Engl. feet. 20' 0"	F

Date when	Length.		Sex.	Date when	Ler	ngth.	Sex.	Date when	Len	igth.	Sex.
measured.	Mother.	Foetus.	Sex.	measured.	Mother.	Foetus.	Sex.	measured.	Mother.	Foetus.	Scx.
	Engl. ft.	Engl. t.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$^{29}/_{10}$ 41	68	2'0"	F	$\frac{12}{12}$ 41	70	6' 8"	M	$^{15}/_{1}$ 42	68	2' 9''	F
²⁰ /11 ···	73	4'0''	\mathbf{F}	¹⁵ / ₁₂ ,	73	7' 6''	F	16/1 ,,	75	7'6''	F
²⁸ /11 ,,	72	4'6''	F	$\frac{26}{12}$,	68	4'3''	?	,, ,,	66	6' 0"	?
$1/_{12}$,	72	3'6''	M	²⁸ /12 ,	75	4'6''	\mathbf{F}	,, ,,	75	7'0"	M
$^{2}/_{12}$,,	70	5'0''	\mathbf{F}	$\frac{2}{1}$ 42	74	1'6''	\mathbf{F}	26/3 ,	68	14'0"	\mathbf{F}
$^{6/_{12}}$,	73	5'0''	\mathbf{F}	⁸ /1 ,,	70	7'3''	M	30/3 ,,	70	8' 6"	\mathbf{F}
,, ,,	72	9' 3"	M	,, ,,	72	9' 0"	Μ	¹¹ / ₄ ,	73	15'0''	\mathbf{F}

Fin-whale foetuses.

Total 21 fin-whale foetuses, of which 6 males and 13 females. Sex was not stated for 2 foetuses. Of the 19 foetuses for which sex was stated 31.58 per cent were males and 68.42 per cent were females.

Date when	Len	Sex.	
measured.	Mother.	Foctus.	-3C A .
	Engl. ft.	Engl. ft.	
$\frac{4}{12}$ 41	41	0' 8″	Μ
⁶ / ₁₂ ,,	41	1'0"	\mathbf{F}

Date when	Len	Sex		
Date when measured.	Mother.	Foetus.	ot A	
² / ₂ 42	Engl. ft.	Engl. ft.		
	51	5'0''	М	
$\frac{4}{3}$,	56	7'0"	\mathbf{F}	

b. Coast of Peru summer 1942. Sperm-whale foetuses.

Da wh		Lei	ngth.	Sex.	x. when Length. Sex.		Date when	Ler	Sex.			
measu		Mother.	Foetus.	Sex.	measured.	Mother.	Foetus.	SCA.	measured.	Mother.	Foetus.	June 1
		Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
16/5 ., 17/5 ., .,	42 ,, ,, ,, ,, ,,	$36 \\ 32 \\ 32 \\ 34 \\ 31 \\ 31 \\ 33 \\ 32$	5'0''4'0''3'0''6'0''5'0''3'0''6'0''4'0''	F F F F F M M	$\begin{array}{cccc} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & $	32 36 32 33 33 34 37 34	3'0'' 6'0'' 4'0'' 3'0'' 5'0'' 5'0''	M F F F F F M	$24/_5$ 42 $25/_5$,, $25/_5$,,	32 33 35 31 36 36 34 33	4' 0" 3' 0" 3' 0" 5' 0" 3' 0" 3' 0" 4' 0"	F F F M F F F F F
$\frac{18}{5}$ $\frac{21}{5}$ $\frac{18}{5}$	>> >> >> >> >> >> >> >> >> >> >>	$ \begin{array}{r} 32 \\ 34 \\ 33 \\ 35 \\ 37 \\ \end{array} $	5'0" 6'0" 3'0" 5'0" 4'0"	F M F F F	24/5 , , , , , , , , , , , , , , , , , , ,	$ \begin{array}{r} 35 \\ 35 \\ 34 \\ 34 \\ 34 \\ 32 \end{array} $	$ \begin{array}{c} 5 & 0'' \\ 6' & 0'' \\ 2' & 0'' \\ 4' & 0'' \\ 4' & 0'' \\ 6' & 0'' \end{array} $	M M F F M	$\begin{array}{c} & & & & \\ & & & & \\ & & & & \\ & & & & $	$31 \\ 32 \\ 34 \\ 34 \\ 33$	2' 0'' 5' 0'' 3' 0'' 4' 0'' 4' 0''	M M F M M

Date	Lei	ngth.	g.	Da		Ler	ngth.	9	Dat		Ler	igth.	Sex.
when measured.	Mother.	Foetus.	Sex.	who measu		Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
North Name in the Statistic Concerns and the g	Engl. ft.	Engl. ft.	1			Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
²⁹ / ₅ 42	33	3'0"	F	²³ /6	42	35	5'0''	Μ	²³ /7	42	35	5' 0"	\mathbf{F}
	37	8'0"	\mathbf{F}		,,	34	6' 0"	\mathbf{F}	27/7	,,	32	8' 0"	\mathbf{F}
⁵ / ₆ ",	39	5'0"	\mathbf{F}	24/6	,,	34	3' 0''	F	,,	,,	34	5'0''	M
	34	6'0"	\mathbf{F}	,,	,,	31	4'0 "	F	,,	,,	33	5'0''	\mathbf{F}
⁶ / ₆ ,,	32	4'0"	M	1	,,	32	7'0"	M	,,	,,	33	5'0''	F
	33	6'0"	M	25/6	,,	34	6' 0"	M		,,	33	5' 0"	M
7/6 "	33	2'0''	M	1	,,	35	5'0''	F	3/8	,,	34	7' 0"	F
,, ,,	34	3' 0"	M	27/6	,,	36	6'0"	F	,,	,,	33	6' 0"	M
,, ,,	33	3' 0"	\mathbf{F}	²⁹ /6	,,	35	6'0 "	M	,,	,,	33	7' 0"	F
·· ··	34	3'0"	\mathbf{F}		,,	34	6'0"	\mathbf{F}	,,	,,	32	7'0"	F
,, ,,	34	4'0''	M	1"/7	,,	32	7' 0"	M	,,	,,	34	6' 0"	M
,, ,,	33	6'0 "	F	,,	,,	32	6' 0"	F	.,,	,,	32	7'0"	F
,, ,,	35	5'0"	F	2/7	,,	33	6'0 "	\mathbf{F}	"/ ₈	,,	37	5'0"	F
,, ,,	35	6'0''	M	."	,,	35	3' 0"	F	,,	,,	31	6'0''	F
,, ,,	35	2'0''	F	3/7	,,	37	$\frac{4'0''}{7'}$	F	27	,,	31	6'0"	F
⁸ / ₆ ,,	34	5'0''	M	,,	,,	32	7'0''	M	8/8	,,	34	6'0''	F M
°/6 ,,	31	4' 0" 6' 0"	F	"	,,	34	5' 0'' 5' 0''	F	"	,,	$\begin{vmatrix} 32 \\ 34 \end{vmatrix}$	6 ′ 0″ 6 ′ 0″	F
** **	35		M	,,	,,	32		F	"	,,		0 0 1' 0"	F
** **	38	5' 0'' 5' 0''	M	,,	••	35	7'0''	M	,,	,,	$\begin{vmatrix} 31 \\ 35 \end{vmatrix}$	$\frac{1}{6'0''}$	F
» »	35		F F	"	,,	32	6′0″	F	,,	••		6'0"	M
** **	35	5'0'' 5'0''	1 1	,,	,,	33	9' 0" 7'0"	M F	,,	"	32 36	5'0"	M
» »	34	50 8'0"	M M	5/7	,,	33	8'0"		9″ <u>8</u>	"	34	5 0 7′ 0″	F
9%;	34	3'0"	F	6/7	,,	31	7'0"	M M	12/	,,	$\frac{34}{28}$	5'0"	F
	$\begin{array}{c} 36\\ 35\end{array}$	3'0"	F	6/7	,,	33 36	10'0"	M		,,	33	$\frac{50}{2'0''}$	F
,, ,,	36	6'0"	M	,,	,,	30	$\frac{10}{4'0''}$	F	,,	"	33	$\begin{bmatrix} 2 & 0 \\ 6' & 0'' \end{bmatrix}$	M
13/6 ,,	37	3' 0"	M	,,	,,	36	8'0 "	F	16/8	,,	32	7'0''	F
	36	4 '0"	F	,,	,,	35	7'0"	M		,,	35	7'0"	M
" "	36	6'0 "	M	,,	,,	34	4'0"	F	,,	"	35	8' 0"	F
¹⁴ / ₆ "	33	6'0"	F	,,	,,	33	$\frac{1}{7'0''}$	M	"	••	34	5'0"	M
16/	35	5' 0"	M	,,	,,	31	8'0"	M	,,,	,,	34	7' 0"	M
	36	4'0"	F	,,	"	34	10'0"	F	17/8	,,	36	10'0"	M
** **	34	3' 0"	M	,,	,,	34	10'0"	M		,,	33	8'0"	M
17/6 "	33	5' 0"	M	7]7	,,	33	4'0 "	F	**	,,	34	7'0"	M
	33	4'0"	M	11	,,	33	8'0"	M	,,	"	34	7'0"	M
¹⁸ / ₆ ,,	32	2'0''	Μ	,,	"	36	8'0"	M	,, ,,	"	34	8'0"	M
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	34	5' 0"	F	9"/7	,,	37	8' 0"	M		" "	35	5'0"	M
,, ,,	36	6'0"	\mathbf{F}	10/7	" "	34	8'0"	F	20/8	,,	38	7'0"	M
,, ,,	37	5'0"	F	11/7	,,	34	6'0"	F	21/8	,,	34	6'0"	\mathbf{F}
,, ,,	35	6'0"	\mathbf{F}	,,	,,	35	5'0"	M	,,	,,	32	4'0"	\mathbf{F}
,, ,,	34	6'0"	M	,,	,,	36	8'0"	M	,,	,,	37	7'0"	Μ
	36	3' 0"	M		,,	35	5'0"	M	,,	,,	34	7'0"	Μ
19%; ";	35	6'0 "	M	14/7	,,	36	5' 0"	Μ	11	,,	34	8'0"	M
,, ,,	33	4'0"	M	15/7	,,	32	8'0"	M	24/8	,,	34	6'0"	M
,, ,,	33	3' 0"	M	18/	,,	35	8'0"	F	. 27,	,,	35	5'0"	M
,, ,,	35	$\frac{3'0''}{5'0''}$	M	18 7	,,	34	8'0"	F	25/8	,,	35	9'0"	F
» »	35	7'0"	M		,,	36	5'0"	M	26/8	,,		5'0"	F
,, ,,	36	6'0''	M	19"/7	,,	33	8'0"	F	,,	,,	36	10'0"	M
» » »	35	6'0''	F	,,	,,	31	8'0"	F		,,	36	8'0"	F
,, ,,	35	5'0''	F	,,	,,	31	5'0''	F	27/8	,,	33	7'0''	F
·· ··	33	4'0''	F	,,	,,	33	8'0	M	,; 20/	"	37	9'0"	M
201 "	36	$\begin{vmatrix} 6'0'' \\ 10'0'' \end{vmatrix}$	F	,,	"	32	10'0''		$\frac{30}{8}$	"	36	$ \frac{4'0''}{7'0''}$	M
²⁰ / ₆ ,,	36	10'0''	M		,,	35	9'0''	F	31/8	,,	30	7'9"	M
,, ,,	34	8'0" 5'0"	F	23/7	,,	32	7'0''	M	"	,,	29	7'0"	F
²³ / ₆ ,,	37	5'0''	M	,,	,,	32	5'0''	F	,,	,,	35	9'0"	M
	$\begin{array}{c c} 34\\ 35\end{array}$	$\begin{array}{c c} 7' 0'' \\ 5' 0'' \end{array}$	M	,,	,,	34	6'0''	M					1
» »			$ \mathbf{F} $	· .,	,,	36	9'0"	$ \mathbf{F} $	1		1 1 7 6 6		1
To	tai 208	sperm-v	whale	e toet	uses.	of w	nch 99	wei	re ma	ies :	and 109	temale	s. or

Table No. 9.-Sperm-whale foetuses (cont.).

Total 208 sperm-whale foetuses, of which 99 were males and 109 females, or 47.60 per cent males and 52.40 per cent were females.

Table No. 10.—Size of pregnant whale females caught in the season 1941/42 and summer 1942.

а.	South	Georgia.
Blu	ie-whale	females.

Length of mothers.	Number of pregnant animals.	
Engl. řect. 90	1	Number of foetuses measured 1

Fin-whale females.

Length of mothers.	Number of pregnant animals.	
Engl. feet. 66 68 70 72 73 74 75	1 4 4 4 4 4 1 3	Number of foetuses measured
Total	21	

Humpback females.

Length of mothers.	Number of pregnant animals.		
Engl. feet. 41	2	Number of foetuses measured	2

Sei-whale females.

Length of mothers.	Number of pregnant animals.		
Eng. feet. 51 56	1	Number of foetuses measured	2

b. Coast of Peru summer 1942. Sperm-whale females.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet. 28 29 30 31 32 33 34	1 1 13 28 37 50	Engl. feet. 35 36 37 38 39 Total	$ \begin{array}{r} 36 \\ 27 \\ 11 \\ 2 \\ 1 \\ 208 \end{array} $	Number of foetuses measured

Table No. 11.—Whale foetuses measured in the season 1941/42 and summer 1942, by species and groups of size, in each month.

a.	South	Georgia.
----	-------	----------

Blue-whale foetuses.

Groups of size.	March.
Engl. feet.	
20′—20′ 11″	1

Fin-whale foetuses.

Groups of size.	Oct.	Nov.	Dec.	Jan.	March.	April.	Total.
Engl. feet.							
1′— 1′ 11″		-		1	-	_	1
2'-2'11''	1			1	-	-	2
3′— 3′ 11″		-	1		-	-	1
4'-4'11''	-	2	2	-		-	4
$5' - 5' 11'' \dots$		-	2	-	-	-	2
6' 6' 1 l "	-	-	1	1	-	-	2
7′ 7′ 11″			1	3	-		4
8′— 8′ 11″		-	-		1	-	1
9′— 9′ 11″		-	1	1	-	-	2
14′—14′ 11″	-	-	-	-	1		1
15′—15′ 11″	-	-	-	-	-	1	1
Total fin-whale foetuses	1	2	8	7	2	1	21
Average size of foetuses	2'	4'	5' 4"	5' 6"	11'	15'	6'1"

Humpback foetuses.

Groups of size.	Dec.
Engl. feet. Less than l' l'—l' ll".	1 1

Sei-whale foetuses.

Groups of size.	Febr.	March.	Total.
Engl. feet.			
5′—5′ 11″	1	_	1
$7'-7' 11'' \dots$	-	1	1

Table No. 11 (continued).

Groups of size.	May.	June.	July.	Aug.	Total.
Engl. feet.					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\frac{1}{2}$				$\begin{array}{c}1\\6\\25\end{array}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\begin{array}{c} 9\\16\\20\end{array}$	$\begin{array}{c} 4\\ 13\\ 5\end{array}$	$\begin{array}{c}2\\7\\12\end{array}$	$\begin{array}{c} 25\\ 44\\ 44\end{array}$
7' - 7' 11'' 8' - 8' 11'' 9' - 9' 11''	1	$\frac{3}{2}$	$egin{array}{c} 8 \\ 15 \\ 3 \end{array}$	$egin{array}{c} 16 \ 5 \ 3 \end{array}$	27 23 6
10'-10' 11" Total sperm-whale foetuses Average size of foetuses	$\frac{-}{41}$ $\frac{4'2''}{4'2''}$	1 65 4'11"	$\frac{4}{53}$ 6' 8"	$\begin{array}{r} 2\\ 49\\ 6'5'' \end{array}$	208 5'7"

b. Coast of Peru summer 1942.

Sperm-whale foetuses.

Table No. 12.—Whale foetuses, by species and sex in each month in the summer 1942.

Coast of Peru.

Kind of foetuses and months.	Num	ibe r of	Total	Number of males per 100	
Kind of focuses and months.	males.	females.	foetuses.	females.	
Sperm-whale foetuses.					
May	14	27	41	52	
June	34	31	65	110	
July	25	28	53	89	
August	26	23	49	113	
Total	99	109	208	91	

			Species of	of whales	a caught.				Е	xpedition	ıs.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}^{1}}$			
South Georgia	125	776	_	73	24		998	50,960	1	~	6
Coast of Africa:								,			
Coast of Natal	10	301	80	34	299		724	27,373	1		5
Atlantic and Arctic:							0.07	11 001			
Azores			-			²) 637	637	11,681	-	-	_
Coast of Portugal		110	-		-	²) 133		2,199		-	-
Coast of Norway ³) New Foundland.	-	110	2	45	6		163	1		-	-
Pacific North:	-		-		-	²) 98	98	3,920	1		1
California		19	~	2				700	г		9
Coast of Peru		19	5		3	-	29	760	T	- 1	3 8
New Zealand	~	-	86		3,299	-	3,299	72,000	- 1	1	0
New Zealand	~		80		-	-	86	3,084	T	-	-
Total	135	1,206	173	154	3,631	²) 868	6,167	171,977	5	1	23

Table No. 1.-Whaling in 1942/43 and summer 1943.

¹) 1 ton = 1,016 kg. ²) No specification. ³) During the war-owing to shortage of food- a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

Table No. 2.-Norwegian whaling in 1942/43 and summer 1943.

		Species of whales caught.							Expeditions.		
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}}$			
Coast of Norway ¹). Coast of Peru		110 -	$^{2}_{-}$	45 -	6 3,299	-	163 3,299		-	-1	
Total		110	2	45	3,3 05		3,462	72,000		1	8

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

Table No. 3.-British whaling in 1942/43 and summer 1943.

			Species of	of whales	s caught.				E	x pedition	ıs.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others		Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{l} \operatorname{Barrel} = \\ {}^{1/_{6}} \operatorname{ton.} \end{array}$			
Coast of Natal	10	301	80	34	299	1	- 724	27,373			5
New Foundland		-	-		-	1) 9		3,920			1
New Zealand	-	-	86		-		- 86	3,084	1		
Total	10	301	166	34	299	¹) 9	8 908	34,377	3		6

¹) No specification.

			Species of	of whales	caught					E	xpedition	s.
Countries.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Oth	ers.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
									$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}} =$			
Norway ¹)	125	110		45	3,305		-	3,462			1	8 6
Argentine British Empire	125 10	$\begin{array}{c} 776 \\ 301 \end{array}$	166	$\begin{array}{c} 73\\34 \end{array}$	$\begin{array}{c} 24 \\ 2\$9 \end{array}$		98	998 908	34,377	3	-	6 6
Portugal United States		19	$\overline{5}$	$\overline{2}$	3	²) '	770 -	770 29	13,880 760	-1	-	-3
Total	13 5	1,206	173	154	3,631	²) (868	6,167	171,977	5	1	23

Table No. 4.—Whaling results for the various countries in 1942/43 and summer 1943.

¹) During the war-owing to shortage of food- a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food. ²) No specification.

Table No. 5.—Average size of whales caught in theSouthern Seas 1942/43.

Coorrentias) eress		;	Average size.	
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
A. Blue-whales. South Georgia Males 57 Females 68 Total 125.	No. 1	72.51	73.78	73.20
B. Fin-whales. South Georgia Males 424 Females 352 Total 776.	No. 1	63.96	65.77	64 .78
C. Sei-whales. South Georgia Males 23 Females 50 Total 73.	No. 1	48.04	50.48	49.71
D. Sperm-whales. South Georgia	No. 1	44.08	_	-

Table No. 6.-Whales caught in the season 1942/43 and summer 1943, by species, sex and size.

a.	South	Georgia.
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Blue-whales.

	Num	ber of	Total		Num	be r of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
67 70 71	$23 \\ 5$	$\begin{vmatrix} 1\\ 22\\ 4 \end{vmatrix}$	$egin{array}{c} 1 \\ 45 \\ 9 \end{array}$	81 82 83	1 -	$\begin{vmatrix} -\\ 1\\ 2 \end{vmatrix}$	1 1 2
72 73 74 75	$egin{array}{c} 7 \\ 2 \\ 6 \\ 5 \end{array}$	$\begin{vmatrix} 8\\7\\1\\3 \end{vmatrix}$	15 9 7	84 89 Sum	 57	$\frac{1}{68}$	$\frac{\begin{array}{c}1\\1\\125\end{array}}$
75 76 77 78 79 80	5 1 4 3 -	3 7 2 3 1 4			e size $\begin{cases} F \\ T \end{cases}$	ales: emales: otal anima ales: 45. emales: 54.	ls: 73.20 "

Fin-whales.

55	14	11	25	71	4	12	16
56	9	4	13	72	1	17	18
57	7	5	12	73	1	13	14
58	13	10	23	74	-	6	6
59	12	6	18	75	-	7	7
60	23	16	39	76	-	3	3
61	20	24	44	77	-	3	3
62	23	15	38	79	-	1	1
63	38	24	62	Sum	424	352	776
64	43	20	63		121	00-	
65	62	38	100		ſ M	lales:	63.96 feet
66	52	29	81	Averag	e size { F	emales:	65.77 "
67	53	21	74		́ Т	otal anima	ls: 64.78 "
68	22	19	41		•		
69	15	18	33	Pe		[ales: 54.	
70	12	30	42		۲J	'emales: 45.	30

43 44	_		1 1	$53 \\ 54$	-	9 6	9 6
46 47	4	$\frac{2}{2}$	6	Sum	23	50	73
48	5	3	8			ales:	48.04 fee
49	8	7	15	Averag	e size { F	emales: otal animal	50.48 "
50 51	1	6	8 7	1	-		
52	-	5	$\frac{1}{5}$	Pe	$\mathbf{r} \operatorname{cent} \left\{ \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right\}$	ales: 31. emales: 68.	51 49

Sei-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
40	2	47	1
41	6	48	3
42	6	53	2
45	1		
46	3	Sum	24

Sperm-whales.

Average size:- Males: 44.08 feet.

b. Coast of Peru summer 1943.

Sperm-whales.

	Num	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
22	1		1	46	47		47
$\frac{1}{23}$	-	2	2	47	48	_	48
$\overline{24}$		ĩ	$\frac{2}{1}$	48	43^{10}		43
25	8	10	18	49	24	_	$\frac{10}{24}$
26	17	$\tilde{27}$	44	50	$\overline{54}$	_	$\overline{54}$
27	23	49	$\hat{\overline{72}}$	51	40	_	$\tilde{40}$
28	27	57	84	$5\overline{2}$	38		38
29	31	90	121	$\overline{53}$	47		47
30	53	176	229	54	29	_	29
31	50	164	214	55	19		19
32	72	228	3 0 0	56	9	-	9
33	73	222	295	57	3		3
34	89	211	300	58	1		1
35	127	167	294	59	1		1
36	105	86	191	60	2	-	2
37	110	48	158				0.000
38	89	18	107	Sum	1,738	1,561	3,299
39	75	5	80				
40	94	-	94			ales:	39.66 feet
41	75	-	75	Average		emales:	32.23 "
42	55	-	55		L To	otal animal	s: 36.14 "
43	67	-	67		(M	ales: 52.6	
44	48	_	48	Per	$\operatorname{cent}\left\{ \begin{array}{c} \mathbf{M} \\ \mathbf{F} \end{array} \right\}$	males: 52.0	29
45	44	-	44		(re	males: 47.6	14

Table No. 7—. Whales caught in the season 1942/43 and summer 1943, by species, sex and groups of size.

a. South Georgia.

Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less) ,, 2. (71 feet to and incl. 85 feet)	46 78	$36.80 \\ 62.40$
", 3. (above 85 feet)	1	0.80
	125	100.00
Immature males	37	64.91
"females	53	77.94
" animals	90	72.00
Mature males	20	35.09
" females	15	22.06
" animals	35	28.00

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)	$\begin{array}{c} 25\\ 412\\ 339 \end{array}$	$3.22 \\ 53.09 \\ 43.69$
	776	100.00
Immature males	$\frac{121}{135}$	$28.54 \\ 38.35$
" animals	256	32.99
Mature males	$\begin{array}{c} 303 \\ 217 \end{array}$	$\begin{array}{c} 71.46 \\ 61.65 \end{array}$
" animals	520	67.01

b. Coast of Peru summer 1943.

Sperm-whales.

	Mal	les.	Fem	ales.	Total a	nimals.
	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.
Group 1. (29 feet and less) , 2. (30 feet to and incl. 34 feet) , 3. (35 feet and above) Total	337	$ \begin{array}{r} 6.1 \\ 19.4 \\ 74.5 \\ \hline 100.0 \end{array} $	324	$ \begin{array}{r} 15.1 \\ 64.1 \\ 20.8 \\ \overline{100.0} \end{array} $	$ \begin{array}{r} 343 \\ 1,338 \\ 1,618 \\ \overline{3,299} \end{array} $	$ \begin{array}{r} 10.4 \\ 40.6 \\ 49.0 \\ \overline{} \\ 100.0 \\ \end{array} $

Table No. 8.—Average production of oil per blue-whale unit in the Antarctic in the season 1942/43.

l blue-whale $= 2$ fin	-whales = $2\frac{1}{2}$	humpbacks =	= 6 sei-whale	8.		
		Blue-whale	Oil production.			
Geographical areas.	Company.	equivalents.	Total.	Per blue-whale equivalent.		
South Georgia	No. 1	525.2	Barrels. ¹) 50,010	95.20		

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.

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

Table No. 9.—Whale foetuses measured in the season 1942/43 and summer 1943.

a. South Georgia.

Blue-whale foetuses.

Date	Len	gth.		Dat		Len	gth.	a
when measured.	Mother.	Foetus.	Sex.	when measured.		Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
$^{24}/_{11}$ 42	70	1' 2"	F	¹⁵ / ₁₂	42	84	3' 3″	\mathbf{F}
$\frac{27}{11}$,	$\begin{array}{c} 76 \\ 73 \end{array}$	$\frac{1'6''}{3'6''}$	F F	$\frac{16}{9}$,,	76 67	6'0'' 5'6''	M F
$\binom{2}{12}, \\ \binom{8}{12}, \\\binom{8}{12}, \\ \binom{8}{12}, \\ \binom{8}{$	89	5'0"	F	\$∕1	43	07	50	r
/12 ,, T-+-1		1	1		c	1.1.1	' .	

Total 7 blue-whale foetuses, of which 1 male and 6 females, or 14.29 per cent males and 85.71 per cent females.

Fin-whale foetuses.

Date when	Length.		th Sex.		3	Ler	igth.	Sex.	Dat whe		Ler	ngth.	Sex.
measured.	Mother.	Foetus.	BEA.	wher measur		Mother.	Foetus.	BEX.	measu		Mother.	Foetus.	SCA.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
$\frac{25}{11}$ 42	70	0' 8"	M	17/1	43	58	6' 3''	F	⁵ /3	43	70	14'0"	М
² /11 ,	79	2'0''	M	20/1	,,	70	7' 9''	M	7/3	,,	68	13' 0"	F
$^{13}/_{12}$,	66	4' 0''	M	²² /1	,,	72	1' 2''	M	15/3	,,	70	8' 6"	\mathbf{F}
¹⁸ / ₁₂ ,	70	5'3''	M	,,	,,	65	1' 6"	\mathbf{F}	,,	,,	71	11' 3″	M
$\frac{19}{12}$,	72	5'0''	\mathbf{F}	,,	,,	72	9' 2''	\mathbf{F}	²⁵ /3	,,	69	7' 6"	M
$\frac{26}{12}$,	74	6' 6''	\mathbf{F}	24/1	,,	70	9' 0"	\mathbf{F}	26/3	,,	70	7'0"	F
²⁹ / ₁₂ ,	73	5'6''	\mathbf{F}	25/1	,,	70	8' 3"	M	29/3	,,	70	11'0"	M
$\frac{4}{1}$ 43	72	7'6''	M	8/2	,,	72	15'0"	F	30/3	,,	75	9'6"	F
7/1	72	4' 3''	M	15/2	,,	70	12'0"	F	1/4	,,	69	14' 6"	M
⁸ /1 ,,	73	9'6''	\mathbf{F}	$\frac{24}{2}$,,	65	10'6"	F	9/4	,,	75	3' 6"	F
$\frac{11}{1}$,	71	7' 3''	\mathbf{F}	27/2	"	73	10' 0"	M	15/4	,,	65	10' 0"	\mathbf{F}

Total 33 fin-whale foetuses, of which 15 males and 18 females, or 45.45 per cent males and 54.55 per cent females.

Sei-wł	nale 1	ioetu	ses.
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		001-1	maic	iociu	303.			
Date	Len	gth.	1	Da		Len	gth.	
when measured.	Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
$^{31}/_{3}$ 43 $^{6}/_{4}$,, $^{8}/_{4}$,,	$51 \\ 53 \\ 49$	9'0" 10'6" 11'0"	M F F	$\frac{14}{4}$ $\frac{21}{4}$ $\frac{3}{5}$	43 ,,	$54 \\ 53 \\ 54$	10' 0" 13' 0" 8' 0"	F F F
$\frac{11}{4}$ "	49	13'0"	M	/ 5	"			-

Total 7 sei-whale foetuses, of which 2 males and 5 females, or 28.57 per cent males and 71.43 per cent females.

b. Coast of Peru summer 1943.

Sperm-whale foetuses.

-	,	1 To	ngth.				Tor	ngth.				La	ngth.	
Da wh	en		-	Sex.	Da wh	en			Sex.	Dat whe	en			Sex.
meas	urea	Mother.	Foetus.		measu	irea.	Mother.	Foetus.		meast	irea.	Mother.	Foetus.	
		Engl.ft.	Engl.ft.				Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
³¹ /7	43	36	7' 0"	F	³¹ /8	43	34	7' 0"	F	16/9	43	34	5' 0"	F
1/8	,,	33	10' 0"	F			33	5'0''	M	,,	,,	34	9'0"	M
4/8	,,	32	7'0"	\mathbf{F}	2/,9	" "	35	8' 0"	F	,,	,,	34	3' 0"	\mathbf{F}
5/8		35	7' 0"	M	3/9		32	9'0''	F	1		35	6' 0"	M
,,	"	34	5'0"	F		,,	34	9' 0"	M	", ",	,,	34	8'0"	M
	"	35	4' 0"	$\mathbf{\bar{F}}$	• • •	"	36	8' 0"	Μ		"	34	8'0"	M
,,	"	36	6' 0"	M	,,	"	32	6' Õ"	M	17/9	"	35	6' 0"	M
"	"	34	7' 0"	F	,,	,,	34	9' 0"	F		"	33	8'0"	M
⁶]/8	"	32	4'0"	M	4]/9	"	35	8' 0"	F	,,,	"	36	8'0"	F
	"	33	3' 0"	F	1	,,	34	3' 0"	M	"	,,	35	8'0"	\mathbf{F}
"	,,	31	6' 0"	M	,,	• • •	35	9' 0"	M	18/9	,,	35	6' 0"	M
,,	"	35	4' 0"	M	,,	,,	32	7' 0"	\mathbf{F}		,,	34	8' 0"	M
,,	"	35	5' 0"	F	5//9	;,	32	8' 0"	M	,,	,,	33	6' 0 "	F
11/8	,,	32	$\frac{3}{4'0''}$	F	6/9	,,	32	10'0"	M	,,	,,	33 - 34	4'0"	M
	,,	33	4'0"	F	7/9	,,	$\frac{32}{34}$	8'0"	M	,,	,,	35	8'0"	F
12/8	"	35	12'0''	F		,,	34	6' 0"	M	26/9	,,	34	2'0''	F
	,,	35	$\frac{12}{9'0''}$	F	,,	"	34	8'0"	F	27/9	"	35	7'0"	F
13/8	,,	32	8'0"	M	,,	"	34	5'0"	M	/9	,,	35	5' 0"	F
	,,	32	6'0"	F	8"/9	,,	33	8'0"	M	28/9	"	34	8'0"	Ē
14/8	,,	32	6'0"	M		"	32	9'0"	M	/9	••	32	7' 0"	F
		36	7' 0"	\mathbf{F}	,,	,,	35	10'0"	F	29/9	••	34	8'0"	M
,,	,,	35	8'0"	M	"	,,	37	9'0"	M		"	35	8'0"	F
,,	"	31	8'0"	M	"	,,	36	6'0"	M	"	,,	33	9'0"	M
15/8	,,	34	6'0"	M	,,	,,	34	10'0"	M	,,	,,	34	5'0"	M
	"	30	8'0"	M	,,	,,	38	8'0"	M	,,	,,	34	6'0"	F
17/8	"	33	6'0"	F	,,	"	36	8'0"	F	30/9	••	34	5'0"	M
		34	8'0"	M	,,	,,	35	7' 0"	Ē	1	**	34	8'0"	F
"	,,	34	6'0"	M	,,	,,	36	7' 0"	M	,,	••	37	6'0"	M
,,	,,	35 - 35	5'0"	F	,,	"	32	7'0"	F	,,	,,	32	7' 0"	M
"	,,	34	6'0"	F	97/9	••	34	8'0"	M	,,	,,	33	9'0"	M
"	,,	34	8'0"	M		,,	33	8'0"	M	"/10	,,	35	8'0"	M
18/8	,,	34	6'0"	M	,,	,,	35	7'0"	F			34	8'0"	M
27/8	,,	33	5'0"	M	,,	,,	33	10' 0"	M	,,	••	30	6'0"	M
		34	8'0"	F	,,	"	34	6'0"	F	77	**	36	11' 0"	F
,,	,,	36	7' 0"	F	,,,,,	,,	37	7' 0"	M	2/10	,,	30	6'0"	F
28/8	,,	34	10' 0"	F	,,	,,	35	5' 0"	F	11		36	5' 0"	M
		34	7' 0"	M	,,	,,	33	5' 0"	M	,,,	,,	37	10' 0"	F
"	,,	34	6' 0"	F	"	,,	34	8'0"	F	**	,,	33	8'0"	Ē
29./8	,, ,	33	9' 0"	$\mathbf{\bar{F}}$,,	,,	33	8'0"	M	,,	,,	35	10' 0"	$\mathbf{\tilde{F}}$
/8	· ,,	32	6' 0"	M	"	"	33	7' 0"	F	³ /10	» • ••	34	9' 0"	M
"	"	33	7'0"	F	"	"	34	5' 0"	M			37	9' 0"	F
"	"	30	6'0"	M	,,	,,	35	7' 0"	M	10/1	»» »	34	9' 0"	M
"	,,	35	7' 0"	M	,,	"	33	6'0"	M			$3\overline{5}$	10' 0"	M
,,	**	36	9'0"	M	10/9	,,	34	5' 0"		,,	,,	36	9'0"	F
"	,,	35	8'0"	F		,,	36	6'0"	M	"	**	34	13' 0"	M
"	,,	36	10' 0"	M	11/	,,	35	8'0"		,,	,,	35	11'0"	M
"	,,	36	10'0"	M	¹¹ / ₉ ¹³ / ₉	"	36	7' 0"		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	34	6'0"	M
30'/E	, ,,	34	6'0"	F	10	,,	36	8'0"		,,	,,	35	10' 0"	M
/ 8	3 ,,	31	9'0"	M	,,,	,,	34	8'0"		"	"	35	7' 0"	M
••	,,	34	8'0"	F	,,	,,	36	9'0"	_	"	"	37	8'0"	M
**	,,	34	6'0"	M	14/9	,,	34	8'0"		"	"	32	8'0"	M
**	,,	21	6'0"	F	15/9		33	7'0"		,,	"	33	11'0"	M
"	,,	36	10'0"	M	11		38	5'0"		11/1	"	34	8'0"	M
••	,,	34	8'0"	M	"	,,	36	6'0"		11		34	6'0"	M
			1 0 0	1 111	11				1 11	11		UT	1 0 0	1 171
" "	,, ,,	36	7' 0"	M	,, ,,	" "	31	5'0"		>> >>	" "	31	8'0"	F

 $\mathbf{5}$

Date when	Le	ngth	Sex.	Date	Ler	ngth	Sex.	Date	Lei	ngth	Sex.
measured.	Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	BEX.
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
¹¹ / ₁₀ 43	32	6' 0"	M	²⁸ /10 43	38	11'0″	M	² / ₁₁ 43	34	6' 0"	М
» » »	35	12'0''	М		35	7'0"	M		36	10' 0"	F
·· ··	34	6' 0"	Μ	²⁹ / ₁₀ ,,	32	10' 0"	F		32	6' 0"	M
	31	7' 0"	Μ		32^{-32}	10' 0"	\mathbf{F}		34	5' 0"	M
	36	8' 0"	M	· · · ·	$3\overline{5}$	11'0"	F	** **	34	8' 0"	M
	33	5' 0"	М	;, ;,	35	12'0''	F	** **	34	11'0"	F
¹² / ₁₀ ,,	34	7' 0"	M	** **	35	13' 0"	M	** **	33	5'0"	F
	33	5' 0"	F	,, ,,	32	10' 0"	M	** **	33	11'0"	F
13/10 ,,	33	5' 0"	$\mathbf{\tilde{F}}^{\perp}$,, ,,	36	11′0″	F	** **	34	8' 0"	M
	31	10' 0"	F	·· ··	33	9' 0 "	$\bar{\mathbf{F}}$	** **	33	5' 0"	\mathbf{F}
14/10 ,,	39	11'0"	F	** **	34	9′ 0 ″	F	** **	38	9' 0"	$\mathbf{\bar{F}}$
	33	8'0"	M	,, ,,	$3\overline{5}$	10' 0"	F	,, ,,	34	11'0"	\mathbf{F}
15/10 ,,	34	6' Õ″	F	,, ,,	33	10' 0"	M	,, ,,	32	6' 0"	\mathbf{F}
/10 ,, · ,, ,,	34	7' 0"	M	³⁰ / ₁₀ ,,	36	13' 0"	F	,, ,,	34	7' 0"	М
	36	9' 0"	F		35	12' 0"	$\mathbf{\bar{F}}$,, ,,	35	10' 0"	\mathbf{F}
** **	35	10' 0"	M	,, ,,	35	12'0''	F	3/11 ,,	33	8'0"	\mathbf{F}
** **	35	6' 0"	F	** **	34	10' 0"	M		33	12'0''	$\mathbf{\tilde{F}}$
** **	31	11'0"	$\bar{\mathbf{F}}$	** **	$3\overline{4}$	7' 0"	F	** **	32	6' 0 "	$\mathbf{\tilde{F}}$
** **	31	12' 0"	M	** **	33	8' 0"	M	,, ,,	$3\overline{2}$	5' 0"	Μ
** **	33	6'0 ″	M	** **	33	7' 0"	F	»» »»	35	7' 0"	F
** **	36	8' 0"	F	³¹ / ₁₀ ,,	36	11′ Õ″	F	4/11 ,,	36	10' 0"	M
16/10 "	31	6' 0"	Ē		35	8'0"	$\mathbf{\bar{F}}$	1	35	10'0"	F
	$3\hat{4}$	12' 0"	M	** **	33	8'0"	M	** **	35	8'0"	F
	31	11'0"	F	,, ,,	34	10' 0"	M	⁵ / ₁₁ "	32	10' 0"	F
17/10 .,	35	3' 0"	$\mathbf{\tilde{F}}$	·· ··	$3\overline{7}$	12' 0"	M	1	32^{-1}	10' 0"	Ñ
	36	8' 0"	$\mathbf{\hat{F}}$	** **	32	6'0 ″	M	** **	30	12' 0"	M
$\frac{18}{10}$, $\frac{10}{10}$, 1	32	6'0"	F	** **	34	11′ Õ″	M	,, ,,	34	<u>9'0"</u>	F
20/10 .,	35	8'0"	M	** **	34	12' 0"	F	** **	$3\overline{5}$	10' 0"	М
	33	8' 0"	M	** **	34	9' 0″	M	7/11 ,,	32	9' 0"	F
·· ··	36	6' 0"	F	** **	32	6' 0"	M		33	10' 0"	M
²¹ / ₁₀ .,	33	9′ 0″	M	·· ··	34	11'0"	M	,, ,,	32	11'0"	M
	34	8′ 0″	F	·· ··	34	12' 0"	F	,, ,,	32^{-1}	9' 0"	M
²² / ₁₀ ,	35	9′ 0″	F	** **	34	¹ 9′ 0″	M	⁸ / ₁₁ ",	34	11' 0″	M
	31	10' 0"	M	** **	33	10'0"	F		33	6'0 "	M
23/10 .,	33	10' 0"	\mathbf{F}	** **	33	9' 0 "	$\mathbf{\hat{F}}$	** **	34	8'0"	M
/10 ;,	35	ĨĨ′ Õ″	M	** **	33	6′ 0″	$\mathbf{\tilde{F}}$	** **	$3\overline{4}$	12' 0"	\mathbf{F}
	33	13' 0"	M	** **	35	11′ Ŏ″	Ê	** **	32	10' 0"	F
,, ,, ,, ,,	35	8'0"	F	·· ··	32	7' 0"	M	·· ·· ·· ··	33	8' 0"	F
»»»»»	31	5' 0"	M	·· ·· ·· ··	33	10' 0"	M	·· ·· ·· ··	35	11'0"	F
	32	9' 0"	F		33	10' 0"	M		30	7' 0"	Μ
²⁵ / ₁₀ ,	36	12'0''	F	"/11 "	32	8'0"	F		31	6' 0"	Μ
,	36	6' 0"	M	· · · · · · · · · · · · · · · · · · ·	30	8'0"	M	¹⁰ / ₁₁ "	32	8' 0"	М
** **	34	12'0"	\mathbf{F}	·· ·· ··	30	7' 0"	F	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	33	10' 0"	М
·· ··	35	11'0"	M II		32	10' 0"	M		34	8' 0"	М
·· ··	34	12' 0"	M	$\frac{?}{2}/11$,	34	8' 0"	F	·· ··	32	9'0"	\mathbf{F}
., .,	32	7' 0"	M	/11 **	33	10' 0"	\mathbf{F}	,, ,, ,, ,,	36	9'0"	\mathbf{F}
·· ··	32	12' 0"	Μ	·· ··	33	6' 0"	M	·· ··	33	8' 0"	M
	36	13' 0"	Μ	·· ·· ··	33	7' 0"	Μ	·· ··	35	10' 0"	Μ
²⁸ /10 ;;	35	10' 0"	Μ	·· ··		10'0"	M	77 77			
	al 211	snorm_w	halo	foetuses	of whi	ah 169	mal	og and 14	2 formal	log or 5	1 09

Table No.9.-Sperm-whale foetuses (cont.).

Total 311 sperm-whale foetuses, of which 168 males and 143 females, or 54.02 per cent males and 45.98 per cent females.

Table No. 10.—Size of pregnant whale females caught in the season 1942/43 and summer 1943.

a. South Georgia.

Blue-whale females.

Length of mothers.	Number of pregnant animals.	
Engl. feet.		
67 70 73 76 84 89	1 1 2 1 1	Number of foetuses measured
Total	7	

Fin-whale females.

Length of mothers.	Number of pregnant animals.	
Engl. feet.		
58 65 66 68 69 70 71 72 73 74 75 79 Total	$ \begin{array}{c} 1\\ 3\\ 1\\ 1\\ 2\\ 10\\ 2\\ 6\\ 3\\ 1\\ 2\\ 1\\ 33\\ \end{array} $	Number of foetuses measured

Sei-whale females.

Length of mothers.	Number of pregnant animals.		
Engl. feet. 49 50 51 53 54	$\frac{2}{1}$ $\frac{2}{2}$	Number of foetuses measured	7
Total	7		

		Sperm-whale temales.
Length of mothers.	Number of pregnant animals.	
Engl. fret. 30 31 32 33 34 35 36 37	$ \begin{array}{r} 11 \\ 15 \\ 39 \\ 54 \\ 85 \\ 59 \\ 36 \\ 26 \\ - \end{array} $	Number of foctuses measured
37 38 39 Total	$\begin{array}{r} 4\\ 4\\ 1\\ \hline 311 \end{array}$	

b. Coast of Peru summer 1943.

Sperm-whale females.

Table No. 11.—Whale foetuses measured in the season 1942/43 and summer 1943, by species and groups of size, in each month.

a. South Georgia.

Blue-whale foetuses.

Groups of size.	Nov.	Dec.	Jan.	Total.
Engl. feet.				
$\begin{array}{c} 1' - 1' \ 11'' \ \dots \\ 3' - 3' \ 11'' \ \dots \\ 5' - 5' \ 11'' \ \dots \\ 6' - 6' \ 11'' \ \dots \end{array}$	2 	$\frac{-2}{1}$	- 1	$2 \\ 2 \\ 2 \\ 1$
Total blue-whale foetuses Average size of foetuses	$\frac{2}{1'}$	4 4′ 3″	$\frac{1}{5'}$	7 3′ 5″

	maio	001000					
Groups of size.	Nov.	Dec.	Jan.	Febr.	March.	April.	Total.
Engl. feet.	1						
Less than 1'	1		-	-			1
1'-1'11''	-	-	2	-	-	-	2
$2' - 2' 11'' \dots$	1		-	-	-		1
$3' - 3' 11'' \dots$			-		-	1	1
$4' - 4' 11'' \dots	-	1	1	-	-	-	2
$5'_{-}$ $5'_{11}''_{-}$	-	3	-		-	-	3
$6' - 6' 11'' \dots \dots \dots \dots$	-	1	1	-	-	-	2
$7' - 7' 11'' \cdots	-		3	-	2	-	5
$8' - 8' 11'' \dots \dots \dots \dots$	-		1		1.	-	2
9' - 9' 11''	-	~	3		1	-	4
10'-10'11''	-	-	-	2		1	3
$11' - 11' 11'' \dots$	-	-		-	2	-	z
12'-12'11''	-	-		1	-	-	1
$13' - 13' 11'' \dots$	-	-	-	-	1	-	1
$14' - 14' 11'' \dots	-	-	-	-	1	1	2
15′—15′ 11″	-	-		1	-	-	1
Total fin-whale foetuses	2	5	11	4	8	3	33
Average size of foetuses	1' 3"	5'	6'2''	11'9''	10'	9'	7' 6"

Fin-whale foetuses.

	Sei-w	hale	foetu	ses.
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Groups of size.	March.	April.	May.	Total.
Engl. feet.				
8′— 8′ 11″		-	1	1
9′— 9′ 11″	1	_	-	1
10′—10′ 11″	-	2	-	2
11′—11′ 11″		1	-	1
13′—13′ 11″	-	2	-	2
Total sei-whale foetuses	1	5	1	7
Average size of foetuses	9′	11'5''	8'	10'7''

b. Coast of Peru summer 1943.

Groups of size.	Aug.	Sept.	Oct.	Nov.	Total.
Engl. feet.					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} 1 \\ 5 \\ $	$ \begin{array}{c} 1\\2\\1\\1\\1\\1\\3\\2\\8\\10\\4\\-\\-\\-\\-\\-\\-\\-\\-\\-\end{array} $	$ \begin{bmatrix} - \\ - \\ 5 16 9 18 13 19 15 8 6 4 4 $	- $ 4$ 7 5 12 6 14 6 3 $ -$	$ \begin{array}{c} 1\\ 4\\ 6\\ 25\\ 51\\ 38\\ 68\\ 33\\ 42\\ 21\\ 12\\ 6\\ 4\\ \end{array} $
Total sperm-whale foetuses	57	83	114	57	311
Average size of foetuses	6'11''	7'8''	9'	8'6"	8

Sperm-whale foetuses.

Table No. 12.—Whale foetuses, by species and sex, in each month in the season 1942/43 and summer 1943.

a South Georgia.

Kind of foetuses and months	Num	ber of	Total	Number of males per 100	
	males.	females.	foetuses.	females.	
Blue-whale fostuses.					
November December January	- 1 -	$\begin{array}{c}2\\3\\1\end{array}$	$2 \\ 4 \\ 1$	33	
Total	1	6	7	17	

Table No. 12 (continued).

Kind of foctuses and months.	Num	ber of	Total	Number of
Kind of focuses and months.	males.	females.	foetuses ma	males per 100 females.
Fin-whale foetuses.				
November	2	-		-
December	2		5	67
January	5		11	83
February	1	3	4	33
March	4	4	8	100
April	1	2	3	50
Total	15	18	33	83
Sei-whale foetuses.				
March	1	-	1	-
April	1	4	5	25
May	_	1	1	_
Total	2	5	7	40

b. Coast of Peru summer 1943.

Kind of foctuses and months.	Num	ber of	Total	Number of males per 100	
Kind of focuses and months.	males.	females.	foetuses.	females.	
Sperm-whale foetuses.					
August	29	28	57	104	
September	47	36	83	131	
October	63	51	114	124	
November	29	28	57	104	
Total	168	143	311	117	

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			Species of	of whale	s cought				Expeditions.		
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	1	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}^{1}}$			
South Georgia	28	632	4	197	101	_	962	50,001	1	-	7
Antarctic, pelagic whaling Coast of Africa:—	311	526	-	-	-	-	837	82,000	-	1	8
Coast of Natal	5	227	115	24	448	-	819	29,380	1	-	5
Atlantic and Arctic: Azores Coast of Portugal	-	38	-	-	20	²) 343 ²) 75	343 133	7,103 2,970	-	-	-
Coast of Norway ³)	-	112	-	31	4	-	147	?	-	-	-
New Foundland . Pacific North:—	4	171	6	1	17	-	199	7,200	1	-	3
California	-	1	1	2	1	-	5	148	1	-	2
Coast of Chile	2	61	-	-	304	-	367	13,863	1	-	3
New Zealand	_		71		-	-	71	2,988	1		-
Total	350	1,768	197	255	895	²) 418	3,883	195,653	6	1	2 8

Table No. I.-Whaling in 1943/44 and summer 1944.

¹) 1 ton = 1,016 kg. ²) No specification. ³) During the war-owing to shortage of food-a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

Table No. 2.-Norwegian whaling in 1943/44 and summer 1944.

	Species of whales caught.							Expeditions.			
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{l} \text{Barrel} = \\ {}^{1/_{\theta}} \text{ ton.} \end{array}$			
Antarctic, pelagic.	311	526	-		-	-	837	82,000	-	1	8
Coast of Norway1).	-	112	-	31	4	-	147	?	-		
Total	311	638	-	31	4	-	984	82,000	-	1	8

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.

Table No. 3.-British whaling in 1943/44 and summer 1944.

Geographical areas.	Species of whales caught.								Expeditions.		
	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{l} \text{Barrel} = \\ {}^{1/_{6}} \text{ ton.} \end{array}$			
Coast of Natal	5	227	115	24	448	-	819	29,380	1		5
New Foundland	4	171	6	1	17	-	199	7,200	1	-	3
New Zealand	-	-	71	-		-	71	2,988	1	-	
Total	9	398	192	25	465	-	1,089	39,568	3	-	8

			Species a	f whole		Expeditions.					
Countries,	Species of whales caught. Oil Blue. Fin. Hump- back. Sei. Sperm. Others. Total of whales.						Shore sta- tions.	Float- ing fac- tories.	Catch- ers.		
								$\begin{array}{l} \text{Barrel} = \\ {}^{1/_{6}} \text{ ton.} \end{array}$			
Norway ¹)	311	638	_	31	4	_	984	82,000		1	8
Argentine	28	632	4	197	101	-	962	50,001	1	-	7
British Empire	9	398	192	25	465	- 1	1,089	39,568	3	-	8
Chile	2	61	****		304		367	13,863	1	-	3
Portugal	—	38			20	$^{2})$ 418	476	10,073		-	-
United States		1	1	2	1	í –	5	148	1		2
Total	350	1,768	197	255	895	²) 418	3,883	195,653	6	1	2 8

Table No. 4.-Whaling results for the various countries in 1943/44 and summer 1944.

¹⁾ During the war--owing to shortage of food--a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food. ²) No specification.

Table No. 5.-Average size of whales caught in the Southern Seas 1943/44.

Geographical areas.		Average size.						
Number of whales measured.	Company.	Males.	Females.	Total animals.				
A. Blue-whales.		Engl. feet.	Engl. feet.	Engl. feet.				
South Georgia Males 11 Females 13 } Total 24.	No. 1	71.18	74.54	73.00				
Antarctic, pelagic whaling Males 148 Females 163 } Total 311.	No. 1	75.78	79.87	77.93				
B. Fin-whales.								
South Georgia Males 289 Females 254 } Total 543.	No. 1	64.59	65.95	65,23				
Antarctic, pelagic whaling Males 283 Females 246 } Total 529.	No. 1	65.19	67.55	66.29				
$\begin{array}{ccc} \underline{\textbf{C. Humpbacks.}}\\ South & Georgia \\ Males & 2\\ Females & 2 \\ \end{array} \right\} \text{ Total 4.}$	No. 1	42.50	38.50	40.50				
D. Sei-whales.								
South Georgia Males 63 Females 99 } Total 162.	No. 1	48.62	50,66	49.86				
E. Sperm-whales. South Georgia Males 89.	No. 1	50.17	_	_				

a. South Georgia.

Blus-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less) , 2. (71 feet to and incl. 85 feet) , 3. (above 85 feet)	14 9 1	58.33 37.50 4.17
Immature males, females	$\frac{24}{10}$	$\frac{100.00}{90.91}\\61.54$
" animals	18	75.00
Mature males females	$\frac{1}{5}$	$\begin{array}{r}9\ 09\\38.46\end{array}$
" animals	6	25.00

Fin-whales.

Group 1. (55 feet and less) , 2. (56 feet to and incl. 65 feet) , 3. (above 65 feet)	18 254 271 543	3.3146.7849.91100.00
Immature males	87 91	30.10 35.83
" animals	178	32.78
Mature males	$\begin{array}{c} 202 \\ 163 \end{array}$	$\begin{array}{c} 69.90\\ 64.17\end{array}$
,, animals	365	67.22

b. Antarctic, pelagic whaling.

Blue-whales.

Group 1. (70 feet and less) , 2 (71 feet to and incl. 85 feet) , 3. (above 85 feet)	$\begin{array}{c}18\\265\\28\end{array}$	5.79 85.21 9.00
A rest	311	100.00
Immature males	$\begin{array}{c} 46 \\ 47 \end{array}$	$\begin{array}{c} 31.08 \\ 28.83 \end{array}$
" animals	93	29.90
Mature males	$\frac{102}{116}$	68.92 71.17
" animals	218	70.10

Table No. 7 (continued).	Table	No.	7	(continued)	۱.
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	Number of whales.	Per cent.
Group 1. (55 feet and less) " 2. (56 feet to and incl. 65 feet) " 3. (above 65 feet)	225	$0.57 \\ 42.53 \\ 56.90 \\ 100.00$
Immature males , females , animals	$58 \\ 71 \\ 129$	20.50 28.86 24.39
Mature males " females " animals	$\begin{array}{r} 225\\175\\400\end{array}$	79.50 71.14 75.61

Fin-whales.

Table No. 8.—Average production of oil per blue-whale unit in the Antarctic in the season 1943/44.

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.		
South Georgia	No. 1	378.4	Barrels. ¹) 45,501	Barrels. ¹) 120.2		
Antarctic, pelagic whaling	No. 1	574.0	82,000	142.9		

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

Table No. 9.—Whale foetuses measured in the Southern Seas in the season 1943/44.

Blue-whale foetuses

Date when	Length.		Date		Len	gth.	Sex.	Date when	Len	Sex.		
measured.	Mother.	Foetus.	Sex. when measured.		Mother.	Foetus.	bex.	measured.	Mother.	Foetus.	bex.	
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	78 72 92 79 91 81 87 84 84 84 78 84 78	11' 0" 9' 0" 17' 0" 10' 0" 13' 0" 7' 0" 12' 0" 11' 0" 5' 0" 15' 0" 7' 0"	M F M F M M F M M F M	$ \begin{array}{c} 1/2 \\ 4/2 \\ \\ 5/2 \\ 6/2 \\ \\ \\ \\ $	44 ,, ,, ,, ,, ,, ,, ,, ,, ,,	88 84 89 91 89 88 84 76 89 81 84	11'0" 12'0" 9'0" 12'0" 15'0" 7'0" 10'0" 12'0" 12'0" 8'0" 7'0"	M F M F M M M M M M	17/2 44 37 37 $3729/2$ 37 $371/3$ 3737 37 3737 37 37 3737 37 37 37 37 37 37 37	83 75 80 86 75 86 80 80 80 89 89 86 85	15'0" 9'0" 18'0" 7'0" 8'0" 9'0" 9'0" 13'0" 14'0" 15'0"	M F F F F F F F F F F F F F F F F F F F

Table No. 9.-Blue-whale foetuses (cont.).

Date when		Length.		Sex.	Da		Ler	ngth.	Sex.	Date when	Lei	ngth.	Sex.
measu		Mother.	Foetus.	DCA.	when measured.		Mother.	Foetus.	bex.	measured.	Mother.	Foetus.	DUA.
		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
⁵ /3	44	75	12'0''	М	10/3	44	79	9' 0"	F	¹⁸ / ₃ 44	84	12' 0"	\mathbf{F}
	"	84	8'0"	Μ	,,	,,	82	14' 0"	M	²¹ /3 ,	81	15'0''	\mathbf{F}
6 ^{′′} /3	,,	84	11'0''	Μ		,,	82	19' 0"	F	²² / ₃ ,	89	15'0''	M
,,	,,	79	8' 0"	F	11/3	,, '	78	15'0''	\mathbf{F}	23/3 ,,	92	20' 0''	M
."	,,	86	15'0''	M	,,	,,	85	12'0''	M	·· ··	78	15'0''	\mathbf{F}
9'/ ₃	,,	86	21'0''	M		,,	81	12'0''	M	²⁴ / ₃ ,	85	8' 0"	M
,,	,,	88	15'0''	\mathbf{F}	$\frac{12}{3}$,,	87	18'0''	\mathbf{F}	$\frac{28}{3}$,	83	16'0''	\mathbf{F}
,,	,,	79	10' 0"	\mathbf{F}	13/3	,,	75	8'0''	M	$\frac{29}{3}$,	83	15'0''	\mathbf{F}
"	,,	77	18'0''	M	14/3	,,	81	18'0''	M	³¹ / ₃ ,,	82	11'0''	\mathbf{F}
,,	,,	78	8' 0"	\mathbf{F}	18/3	,,	87	5'0''	\mathbf{F}				
Total 62 blue-whale foetuses, of which 32 males and 30 females, or 51.61 per										and 30 fe	males,	or 51.61	\mathbf{per}

cent males and 48.39 per cent females.

Fin-whale foetuses.

29/11 43 $3''_{12}$ 13/12 19/12 $20'_{12}$ $21'_{12}$ $21'_{12}$ $20'_{12}$ $21'_{12}$ $7'_{1}$ 44 $9'_{1}$ $7'_{1}$ 47 $7'_{1}$ $7'_{1}$ 1 $7'_{1}$ $7'_{1}$ 1 $7'_{1}$ 7'	$\left \begin{array}{c} 66\\ 67\\ 78\\ 68\\ 71\\ 76\\ 71\\ 72\\ 72\\ 72\\ 70\\ 68\\ 78\\ 77\\ 76\\ 69\\ 74\\ 77\\ 76\\ 75\\ 70\\ 69\\ 71\\ 74\\ 68\\ 70\\ 68\\ 70\\ 69\\ 71\\ 74\\ 68\\ 70\\ 68\\ 70\\ 69\\ 71\\ 74\\ 68\\ 70\\ 68\\ 70\\ 69\\ 71\\ 74\\ 68\\ 70\\ 68\\ 70\\ 70\\ 70\\ 70\\ 70\\ 71\\ 74\\ 74\\ 70\\ 70\\ 70\\ 70\\ 70\\ 70\\ 70\\ 70\\ 70\\ 70$	$\begin{array}{c} 2' 0'' \\ 3' 3'' \\ 5' 0'' \\ 3' 6'' \\ 5' 9'' \\ 6' 9'' \\ 3' 6'' \\ 2' 0'' \\ 1' 5'' \\ 4' 6'' \\ 4' 0'' \\ 7' 0'' \\ 7' 6'' \\ 7' 6'' \\ 7' 0'' \\ 9' 0'' \\ 8' 6'' \\ 10' 0'' \\ 16' 0'' \\ 10' 0'' \\ 6' 0'' \\ 7' 0'' \\ 6' 0'' \\ 12' 0'' \\ 12' 0'' \\ \end{array}$	FMFFMFFFMMFFFMMMMMMFMMMFMM	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 72\\ 74\\ 74\\ 70\\ 74\\ 69\\ 76\\ 70\\ 70\\ 72\\ 67\\ 72\\ 73\\ 74\\ 69\\ 69\\ 68\\ 71\\ 67\\ 75\\ 62\\ 72\\ 69\\ 71\\ 73\\ 4\end{array}$	$\begin{array}{c} 8' 0'' \\ 10' 0'' \\ 13' 0'' \\ 7' 0'' \\ 4' 0'' \\ 5' 0'' \\ 4' 0'' \\ 5' 0'' \\ 4' 0'' \\ 12' 0'' \\ 6' 0'' \\ 10' 0'' \\ 16' 0'' \\ 10' 0'' \\ 12' 0'' \\ 15' 0'' \\ 8' 0'' \\ 15' 0'' \\ 8' 0'' \\ 7' 0'' \\ 16' 0'' \\ 12' 0'' \\ 12' 0'' \\ 13' 0'' \\ $	FMFFMFMMMFFFFMFFFFMFMFFFF	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 69\\ 64\\ 67\\ 71\\ 66\\ 67\\ 70\\ 67\\ 66\\ 74\\ 68\\ 69\\ 63\\ 71\\ 64\\ 71\\ 77\\ 66\\ 74\\ 71\\ 66\\ 74\\ 71\\ 66\\ 74\\ 71\\ 66\\ 74\\ 71\\ 71\\ 66\\ 74\\ 74\\ 74\\ 72\\ 71\\ 66\\ 74\\ 74\\ 74\\ 74\\ 74\\ 74\\ 74\\ 74\\ 74\\ 74$	15'0" M 8'0" F 13'0" M 8'0" F 8'0" M 10'0" F 8'0" M 13'0" M 13'0" M 13'0" M 13'0" M 13'0" M 12'6" F 12'6" F 12'6" F 12'6" F 12'6" F 14'0" M 11'0" F 14'0" F 14'0" M 11'0" M
	69	9' 0"	М	²⁸ / ₂ ,,	62	7' 0"	М	$\frac{1}{4}$,, $\frac{2}{4}$,,	71	14′0″ F
	74	7' 0″	\mathbf{F}		69	12' 0"	\mathbf{F}	,, ,,	71	10′0″ F
²⁴ / ₁ ,,				,, ,,				3/4 ,, ,, ,,		
$\frac{28}{1},, \frac{31}{1},$	69 74	7' 0" 5' 0"	F F	2/3 ,, ,, ,,	77 73	17' 0" 12' 6"	M M	›› ›› ›› ››	70 71	10'0" F 11'0" M
$\frac{3/2}{2}$,, $\frac{3}{2}$,, $\frac{3}{2}$,,	65 72 79	$\begin{array}{c c} 4'0'' \\ 3'0'' \\ 4'0'' \end{array}$	F M M	3/3 "	74 70 72	$ \begin{array}{c} 8'0'' \\ 12'0'' \\ 9'0'' \end{array} $	F M M	,, ,, 4/4 ,,	$71 \\ 71 \\ 72$	15'0" M 12'0" F 9'0" F
$\frac{4/2}{5/2}$,, $\frac{5/2}{7/2}$,	68 69	5' 0" 6' 0"	F F	$\frac{4}{3}$, $\frac{4}{3}$, $\frac{4}{3}$	73 73	$13' 0'' \\ 12' 0''$	M M	$\frac{15}{4}$,, $\frac{15}{4}$,, $\frac{24}{4}$,	72 70	12' 6" F 15' 0" M
$\binom{8}{2}$,, $\binom{10}{2}$,,	69 75 72	5' 0" 5' 0" 9' 0"	F F M	$\frac{6}{3}$,,	74 70 76	5' 0" 5' 0" 10' 0"	F F F	25/4 ,, 7/5 ,,	65 74 72	5'0" F 12'0" M 8'0" F
""" Tot males and					74 vhich 5	10′ 0″ 6 males	M and		s, or 49	9.56 per cent

males and 50.44 per cent females.

Date when	Le	ngth.	Com	Date	Lei	ngth.	Con	Date	Ler	ngth.	Sex.
measured.	Mother.	Foetus.	Sex.	when measured.	Mother.	Fcetus.	Sex.	when measured.	Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$\frac{27}{1}$ 44	53	12'0"	F	$^{14}/_{2}$ 44	50	8 ′ 6″	F	$^{26}/_{2}$ 44	50	10' 3"	Μ
30/	50	9'0"	Μ		53	4'6''	?		52	9' 0"	М
31/1	52	8' 0"	Μ	$\frac{15}{2}$, "	53	11' 0"	F	27/2 ···	49	8'0"	F
/1 ,,	54	7'0''	М	16/	49	7' 0"	F	28/	51	7'0"	Μ
$\frac{1}{2}$,	49	7' 0"	Μ		50	3' 6''	M	9/	48	10' 0"	F
/2 ·, ,, ,,	55	7'0"	M	,, ,,	52	5' 0"	F		57	11' 6"	M
	52	6' 0"	M	$\frac{17}{2}$,	52	10'0"	M	19/3 ,,	53	12'0"	F
⁵ / ₂ ,	48	6'0"	F		52	5' 3"	M		51	13 '0"	F
9/	52	8' 0"	F	,, ,,	54	9' 6"	Μ	,, ,,	52	13'0"	F
	53	8'6"	M	,, ,,	52	7' 0"	Μ	$\frac{15}{4}$, "	50	12' 0"	F
$\frac{13}{2}$, ",	51	8' 0"	M	$\frac{20}{2}$, "	$5\overline{2}$	10'0"	M	/4 ,,			
		oi whalo	foot			malor	nd 1	3 females	Sov wo	a not at	atod

Sei-whale foetuses.

Total 32 sei-whale foetuses, of which 18 males and 13 females. Sex was not stated for 1 foetus. Of the 31 foetuses, for which sex was stated, 58.06 per cent were males and 41.94 per cent females.

Table No. 10.—Size of pregnant whale females caught in the Southern Seas in the season 1943/44.

		Diue-	whate temales.	
Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		Number of foetuses measured 62
72	1	84	8	Number of foetuses measured 62
$\ddot{75}$	4	85	3	Total number of blue-whale
$\ddot{76}$	1	86	5	females measured 176, of which
77	ĩ	87	4	pregnant animals 62, or 35.23 per
$\overline{78}$	5	88	3	cent. Total number of mature
79	4	89	5	blue-whale females (above 76 feet)
80	3	91	2	measured 121, of which preg-
81	5	92	2	nant animals 56, or 46.28 per
82	3			cent.
83	3	Total	62	
		Fin-w	rhale females.	
62	1	72	12	Number of foetuses measured 113
$6\tilde{3}$	î	73	5	
64	$\overline{5}$	74	16	Total number of fin-whale fe
65	$\frac{2}{4}$	75	3	males measured 500, of which
66	4	76	5	pregnant animals 113, or 22.6 per cent. Total number of mature
67	$\frac{8}{7}$	77	5	fin-whale females (above 64 feet
68		78	2	measured 338, of which preg
69	12	79	1	nant animals 106, or 31.36 per
70	12		110	cent.
71	12	Total	113	ocnt.
		Sei-w	hale females.	
48	2	54	2	
49	3	55	1	
50	$\frac{3}{5}$	57	1	Number of foetuses measured 32
51	3			
52	10	Total	32	
	5	LUtar	04	6

Blue-whale females.

Groups of size.	Jan.	Febr.	March.	Total.
Engl. feet.				
Less than $1'$ 5' - 5' 11'' 7' - 7' 11'' 9' - 9' 11'' 10' - 10' 11'' 11' - 11' 11'' 12' - 12' 11'' 13' - 13' 11'' 14' - 14' 11'' 15' - 15' 11'' 16' - 16' 11''	- 1 1 2 1 1 - 1 - 1	- 4 1 3 1 1 4 - 2 -	$ \begin{bmatrix} - \\ - \\ 6 \\ 3 \\ 1 \\ 2 \\ 4 \\ 1 \\ 2 \\ 8 \\ 1 \\ - \\ - \\ - $	$ \begin{array}{r} -2 \\ 5 \\ 7 \\ 7 \\ 3 \\ 5 \\ 9 \\ 2 \\ 2 \\ 11 \\ 1 \\ 1 1 1 1 1 $
18′—18′ 11″		1	3	4
19′—19′ 11″			1	1
$\begin{array}{c} 20'-20'11''\ldots\ldots\ldots\\ 21'-21'11''\ldots\ldots\ldots\end{array}$		_	1 1	$\frac{1}{1}$
Fotal blue-whale foetusesAverage size of foetuses	10 11′	17 10′ 7″	$\frac{35}{12'11''}$	$62 \\ 12'$

Table No. 11.—Whale foetuses measured in the Southern Seas in the season 1943/44, by species and groups of size in each month.

Blue-whale foetuses

Fin-whale foetuses.

Groups of size.	Nov.	Dec.	Jan.	Febr.	March.	April.	May.	Total.
Engl. feet.								
$1' - 1' 11'' \dots \dots$	-	1	-		-	_		1
$2' - 2' 11'' \dots	1	1	-	_	-		-	2
$3' - 3' 11'' \dots \dots$	1	3	-	1	-	-		5
$4' - 4' 11'' \dots \dots$		1	1	5		1		8
$5' - 5' 11'' \dots$	-	2	2	5	2	2		13
$6' - 6' 11'' \dots \dots \dots$		1	2	3		-		6
$7' - 7' 11'' \dots$			7	2	1			10
$8' - 8' 11'' \dots \dots$	-		1	4	7	-	1	13
$9' - 9' 11'' \dots$	-	-	2	1	3	1		7
10'-10'11''	-		1	4	4	2		11
11'-11'11''	-	-	-		4	2		6
12'-12'11''	-	-	1	4	5	3		13
13'-13'11''			-	1	5			6
14'-14'11''		-		-		2		2
15'-15'11''			-	1	1	2	-	4
$16'-16' 11'' \dots \dots \dots$		-	1	2	1	-		4
$17'-17' 11'' \dots \dots \dots \dots \dots \dots$		-			1	-	-	1
<u>18′—18′ 11″</u>		-		-		1	-	1
Total fin-whale foetuses	2	9	18	33	34	16	1	113
Average size of foetuses	2'6''	3' 6"	7' 8''	8'2''	10'6''	11'1''	8'	8'8"

Table No. 11 (continue	ed).
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Groups of size.	January.	` February.	March.	April.	Total.
Engl. feet.					
3′— 3′ 11″		1	-	_	1
$4' - 4' 11'' \dots$	_	1	_	-	1
$5' - 5' 11'' \dots$		2	-	-	2
$6' - 6' 11'' \dots$	-	2		-	2
7′— 7′ 11″	1	5		-	6
8′— 8′ 11″	1	5			6
9′— 9′ 11″	1	2	-		3
10′—10′ 11″		3	1		4
11′—11′ 11″	-	1	1	-	2
12'-12'11''	1	-	1	1	3
<u>13'—13' 11"</u>			2	-	2
Total sei-whale foetuses	4	22	5	1	32
Average size of foetuses	9'	7'5''	11'10"	12'	8' 5''

Sei-whale foetuses.

Table No. 12.—Whale foetuses by species and sex, in each month in the season 1943/44.

Antarctic.

Kind of foetuses and months.	Num	ber of	Sex not	Total	Number of males per 100
Kind of loctuses and months.	males.	females.	stated.	foetuses.	females.
Blue-whale foetuses.					
January	7	3		10	233
February	10	7	_	17	143
March	$\overline{15}$	20	_	35	75
Total	32	30		62	107
Fin-whale foetuses.					
November	1	1	_	2	100
December	3	6	_	9	50
January	11	7	-	18	157
February	14	19	_	33	74
March	19	15		34	127
April	8	8	-	16	100
May	-	1	-	1	-
Total	56	57		113	98
Sei-whale foetuses.					
January	3	1	_	4	300
February	$1\overline{4}$	7	1	22	200
March	1	4		5	25
April	-	1		1	-
Total	18	13	1	32	138

			Species of	of whales	cought				Е	xpedition	ns.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}^{1}}$			
South Georgia	128	987	60	76	45	-	1,296	75,540	1	-	7
Antarctic, pelagic whaling	914	679	-	2		-	1,595	148,000	-	1	8
Coast of Africa:		1.00	10		204			,	,		5
Coast of Natal ²). Atlantic and Arctic:	3	16 0	46	34	204	-	447	15,348	T	_	5
Azores	_	-	-	_	_	³) 430	430	8,465	-	-	-
Coast of Portugal	-		_		-	³) 91	91	2,250			-
Coast of Norway ⁴)	3	158	-	27	4	-	192	1,391	⁵) 1	-	⁵) 3
New Foundland	11	169	9	5	22		216		1		4
Coast of Chile	42	80	-		365	-	487	20,784	1	-	3
New Zealand	-	-	88	-		-	88	2,630	1		
Total	1,101	2,233	203	144	640	³) 521	4,842	281,677	6	1	30

Table No. I.-Whaling in 1944/45 and summer 1945.

¹) 1 ton = 1,016 kg. ²) The figures given are the catch results up to the end of August 1945. ³) No specification ⁴) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast Fishing boats were used as catchers and the whale meat sold for human food. ⁵) Catch results for the shore station and 3 catchers: 3 blue-whales, 27 fin-whales = 1,391 barrels of whale oil.

Table No. 2.-Norwegian whaling in 1944/45 and summer 1945.

		Species of whales caught.							Expeditions.				
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Sho sta tion		Float- ing fac- tories.	Cat er	
Antarctic, pelagic Coast of Norway ¹).	914 3	679 158		2 27	-4		1,595 192	$\begin{array}{l} \text{Barrel} = \\ {}^{1}/_{6} \text{ ton.} \\ 148,000 \\ 1,391 \end{array}$	2)	ĩ	1	2)	83
Total	917	837	-	29	4		1,787	149,391		1	1		11

¹) During the war—owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food.²) Catch results for the shore station and 3 catchers: 3 blue-whales, 27 fin-whales = 1,391 barrels of whale oil.

Table No.	3.—British	whaling	in	1944/45	and	summer	1945.
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			Species o	f whales		Expeditions.					
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
Coast of Natal ¹) New Foundland New Zealand	3 11 -	160 169 -		34 5 -	204 22 -		447 216 88		1 1 1	-	5 4 -
Total	14	329	143	39	226	-	751	25,247	3	-	9

¹) The figures given are the catch results up to the end of August 1945.

			Species o	f whales	eaught				Expeditions.			
Countries.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	
								$\frac{\text{Barrel}}{\frac{1}{6} \text{ ton.}}$				
Norway ¹)	917	837		29	4		1,787	149,391	1	1	11	
Argentine	128	987	60	76	45		1,296	75,540	1	-	7	
British Empire	14	329	143	39	226		751	25,247	3		- 9	
Chile	42	80	_	_	365	_	487	20,784	1	-	3	
Portugal	-		_	-	-	²) 521	521	10,715	-			
Total	1,101	2,233	203	144	640	²) 521	4,842	281,677	6	1	30	

Table No. 4.—Whaling results for the various countries in 1944/45 and summer 1945.

¹) During the war-owing to shortage of food—a number of licenses were issued for whaling on the Norwegian coast. Fishing boats were used as catchers and the whale meat sold for human food. ²) No specification.

Table No. 5.—Average size of whales caught in the Southern Seas 1944/45.

Geographical		Average size.				
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.		
A. Blue-whales.		Engl. feet.	Engl. feet.	Engl. feet.		
$\begin{array}{ccc} South & Georgia\\ Males & 53\\ Females & 75 \end{array} \right\} \text{ Total 128.}$	No. 1	72.38	74.09	73.38		
$\left.\begin{array}{c} Antarctic, \ p \leq lagic \ whaling \ \ldots \ \ldots \\ Males \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	No. 1	76.34	79.29	77.91		
B. Fin-whales.						
$\left.\begin{array}{c} South \ Georgia \dots \\ Males \ 480 \\ Females \ 507 \end{array}\right\} Total \ 987.$	No. 1	64.34	66.33	65.36		
$\left.\begin{array}{c} \text{Antarctic, pelagic whaling} \dots \dots \\ \text{Males} 401 \\ \text{Females} 278 \end{array}\right\} \text{Total 679.}$	No. 1	66.25	68.89	67.33		
$\begin{array}{c ccc} \hline \textbf{C.} & \textbf{Humpbacks.} \\ South & Georgia \\ Males & 23 \\ Females & 37 \\ \end{array} \right\} \text{ Total } 60.$	No. 1	41.04	42.65	42.03		
$\begin{array}{c} \begin{array}{c} \textbf{D. Sei-whales.}\\ South \ Georgia \dots \\ Males \ 23 \\ Females \ 53 \end{array} \end{array} \right\} \text{Total 76.}$	No. 1	48.57	51.38	50.53		
Antarctic, pelagic whaling Males 2.	No. 1	50.50	-	_		
E. Sperm-whales. South Georgia Males 45	No. 1	48.91	-	_		

Table No. 6.—Whales caught in the season 1944/45 and summer 1945, by species, sex and size.

Total Antarctic.

Blue-whales.

	Total		nber of	Total			
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
64	1	_	1	84	10	41	51
65	_	_	-	$8\hat{5}$	5	$\frac{11}{26}$	31
66	4	1	5	86	$\frac{3}{2}$	18	20
67	_	1	1	87	1	13	14
69	-	1	ī	88	_	$\tilde{10}$	$\tilde{10}$
70	48	45	$9\overline{3}$	89	_	8	8
71	29	31	60	90		4	4
72	36	26	62	91	-	$\frac{2}{2}$	$\frac{2}{2}$
73	31	24	55	92		2	2
74	39	22	61	93	-	1	1
75	43	32	75	95	-	1	1
76	37	22	59	Sum	482	560	1,042
77	35	21	56		102		1,012
78	43	46	89		(N	fales:	75.91 feet
79	36	37	73	Averag	e size { F	'emales:	78.59
80	37	36	73		r	'otal animal	ls: 77.35 "
81	13	30	43		()	Talaa 46	
82	23	28	51	Per	$\operatorname{cent} \left\{ \begin{array}{c} \mathbf{M} \\ \mathbf{H} \end{array} \right\}$	Iales: 46. 'emales: 53.	-20 -74
83	9	31	40		<u>ر</u> ۲	cmates. ob.	
Fin-whales.							
53	2		2	72	19	51	70
55	$1\overline{2}$	11	$2\bar{3}$	73	2	52	54
56	6	11	17	74	1	29	30
57	10	6	16	75	$\overline{2}$	19	21
58	13	12	25	76	1	13	14
59	22	12	34	77	-	9	9
60	42	41	83	78	1	3	4
61	40	25	65	79	-	3	3
62	47	25	72	80	-	1	1
63	63	33	96				
64	71	42	113	Sum	881	785	1,666
65	85	49	134				
66	121	65	186			Iales:	65.21 feet
67	105	77	182	Averag		emales:	67.24 "
68	85	58	143		r j	'otal animal	ls: 66.17 "
69 50	74	40	114	D	. []	Iales: 52	.88
$\begin{array}{c c}70\\71\end{array}$	$33 \\ 24$	53 45	86 69	Per	$\operatorname{cent} \{ \mathbf{F} \}$	Iales:52.Vemales:47.	.12
	2 4	40	1	-whales.			
4.6		1				-	
$\frac{46}{47}$	$\frac{1}{4}$	$\frac{-}{2}$	1 6	54	. –	$\frac{5}{2}$	$\frac{5}{2}$
$\begin{array}{c} 47 \\ 48 \end{array}$	$\frac{4}{6}$	$\begin{vmatrix} 2\\ 2 \end{vmatrix}$	8	56			-
48	6		9	Sum	25	53	78
50^{49}	7	13	20		ſŊ	Iales:	48.72 feet
$50 \\ 51$		8	8	Averag		emales:	51.38
52	1	8	9		Γ	'otal animal	ls: 50.53 "
53		10	10	–	, Ì I	Iales: 32.	05
				Pe:	r cent { 🕯	Females: 67.	05

Table No. 6 (continued).

			2140	Wildios.			
Teul Aut	Nun	iber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	ani mal s.	Engl. feet.	males.	females.	animals.
70	30	32	62	83		3	3
71	1	7	8	84	-	3	3
72	4	2	6	86		3	3
73	4	5	9	88	-	1	1
74	1	2	3	89	-	1	1
75	2	$\frac{2}{5}$	7	Sum	53	75	128
76	4	1	5	<u> </u>		1 10	120
77	1	1	2		ſM	ales:	72.38 feet
78	1	5	6	Average	Average size { Fe		74.09 "
79	1	2	3	0		otal anima	ls: 73.38 "
80	2	1	3				
81	1	1	2	Per	cent {	ales: 41. emales: 58.	.41
82	1	-	1		(F	emaies: 58.	.99

a. South Georgia.

Blue-whales.

Fin-whales.

	1	1		E		1	1
53	1		1	71	5	18	23
55	11	10	21	72	3	19	22
56	4	9	13	73	-	34	34
57	7	6	13	74	1	16	17
58	8	8	16	75	1	12	13
59	19	11	30	76	-	6	6
60	26	39	65	77	-	3	3
61	27	17	44	78	-	1	1
62	30	17	47	79	-	3	3
63	49	27	76	Sum	480	507	987
64	48	36	84		100	1 001	001
65	49	35	84		(M	ales:	64.34 feet
66	60	37	97	Averag	ge size { F	emales:	66.33 "
67	47	50	97			otal anima	
68	34	40	74		``		
69	35	25	60	Per	$: cent \left\{ \begin{array}{c} M \\ T \end{array} \right\}$	ales: 48	.63
70	15	28	43		(F	emales: 51	.37

Sei-v	vha	les.
-------	-----	------

$\begin{array}{c} 46 \\ 47 \\ 48 \end{array}$	$\frac{1}{4}$	$\frac{-2}{2}$	$1 \\ 6$	$\frac{54}{56}$			5 2
40	5	2	8	Sum	23	53	76
$\overline{50}$	$\frac{6}{7}$	13	20		(<u>M</u>	ales:	48.57 feet
51	-	8	8	Averag	e size { F	emales: otal animal	51.38 ,,
52	-	8	8		· ·		
53	-	10	10	Per	$\operatorname{cent} \left\{ \begin{array}{l} M \\ \mathbf{F} \end{array} \right\}$	ales: 30. emales: 69.	26 74

Engl.

	Spei	rm-whales.	
gl. feet.	Males.	Engl. feet.	Males.
37 40 41 44 45 47	$\begin{array}{c}3\\1\\2\\2\\4\\\end{array}$	52 53 54 55 57 59	$\begin{array}{c} 6\\ 4\\ 2\\ 2\\ 1\\ 1\\ 1\end{array}$
48	6	Sum	45
$49 \\ 50 \\ 51$	$\begin{array}{c} 4\\5\\1\end{array}$	Average s	size: 48.91

Average size: 48.91 ft.

	Num	Number of			Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
35 36	3 -	3 1	6 1	47 48	-	1 3	1 3
37 38	1	3	4	49 Sum		$\frac{2}{37}$	$\left \frac{2}{60} \right $
40	3	5	8	- Sum		<u>.</u>	
$\begin{array}{c c} 41 \\ 42 \end{array}$	$\frac{4}{3}$	3	73	Averag		ales: emales:	41.04 feet 42.65 "
43	3	2	5		T J	otal anima	
$\begin{array}{c} 44 \\ 45 \end{array}$	$\frac{1}{3}$	5 6	6 9	Per	$\operatorname{cent} \left\{ \begin{array}{c} M \\ T \end{array} \right\}$	ales: 38	.33
46	1	3	4		(r	emales: 61	.07

b. Antarctic, pelagic whaling. Blue-whales.

and the second s	1	1		1]	1	1
64	1	-	1	85	5	26	31
66	4	1	$\overline{5}$	86	2	15	17
67	_	1	1	87	1	13	14
69	-	1	1	88	-	9	9
70	18	13	31	89	-	7	7
71	28	24	52	90	-	4	4
72	32	24	56	91	-	2	$\begin{array}{c} 4\\ 2\\ 2\end{array}$
73	27	19	46	92	_	2	2
74	38	20	58	93	-	1	1
75	41	27	68	95	-	1	1
76	33	21	54	Sum	429	485	914
77	34	20	54	Dum	140	1 100	011
78	42	41	83		(M	ales:	76.34 feet
79	35	35	70	Averag		emales:	79.29
80	35	35	70	Averag	<u>ה (אני אי</u>	otal anima	le. 77 01
81	12	29	41		(I	otar amma	,
82	22	28	50		. (M	ales: 46	.94
83	9	28	37	Per	$\operatorname{cent} \left\{ \begin{array}{c} \mathbf{m} \\ \mathbf{F} \end{array} \right\}$	emales: 53	.06
84	10	38	48		τ-		

Table No. 6 (continued).

Engl. feet.	Num	Number of		Engl. feet.	Num	be r of	Total
Engl. leet.	males.	females.	animals.	Engl. leet.	males.	females.	animals.
53	1	_	1	71	19	27	46
55	ī	1	$\tilde{2}$	$\overline{72}$	16	32	48
56	$\overline{2}$	$\overline{2}$	4	73	2	18	20
57	$\frac{2}{3}$	-	3	74	-	13	13
58	5	4	9	75	1	7	8
59	3	1	4	76	1	7	8 8
60	16	2	18	77	_	6	6
61	13	8	21	78	1	2	3
62	17	8	25	80	-	1	1
63	14	6	20	Sum	401	278	679
64	23	6	29				
65	36	14	50		f M	ales:	66.25 feet
66	61	28	89	Averag		emales:	68.89 "
67	58	27	85		ίT	otal anima	ls: 67.33 "
68	51	18	69		(M	ales 59	
69	39	15	54	Per	$\operatorname{cent} \left\{ \begin{array}{c} m \\ \mathbf{F} \end{array} \right\}$	ales: 59 emales: 40	94
70	18	25	43	ų.	(r		.01

Fin-whales.

Sei-whales.

Engl. feet.	Males.
$\begin{array}{c} 49 \\ 52 \end{array}$	1
Sum	2
	MIL FOFO f.

Average size: Males: 50.50 feet.

Coast of Norway summer 1945. Blue-whales.

Engl. feet.	Males.
61	1
67	1
77	1
Sum	3

Average size: Males: 68 33 feet.

Fin-whales.

Engl. feet.	Num	ber of	Total	Dural fact	Nu	nber of	Total animals.	
	males.	females.	animals.	Engl. feet.	males.	females.		
$50 \\ 51$	1	-	1	$64 \\ 65$	1	1	$\frac{2}{1}$	
52 53	1 1	$\begin{array}{c} 1\\ 2\\ 1\end{array}$	$\frac{1}{3}$	$\begin{array}{c} 66\\ 67\end{array}$	66 –		1 1	
$54 \\ 57$	$\overline{\frac{1}{2}}$	1 1	$\frac{1}{3}$	Sum	14	13	27	
59 60 61	3 1 1	- 2	3	Average size {		Males: Females: Fotal animal	58.50 feet 58.62 " s: 58.56 …	
62 63	$\frac{1}{2}$		$\frac{2}{1}$	Per	oont j]	Males: 51. Females: 48.	85	

Table No. 7.—Whales caught in the season 1944/45 in the Antarctic, by species, sex and groups of size.

Total Antarctic.

Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less) , 2. (71 feet to and incl. 85 feet) , 3. (above 85 feet)	879	9.6984.365.95100.00
Immature males	$\begin{array}{r}149\\205\\\hline\end{array}$	30.91 36.61 33.97
Mature males ,, females ,, animals	333 355 688	69.09 63.39 66.03

Fin-whales.

	Number of whales.	Per cent.
Group 1. (55 feet and less)	$\frac{25}{655}$	$1.50 \\ 39.32$
, 2. (56 feet to and incl. 65 feet)		$59.52 \\ 59.18$
	1,666	100.00
Immature males	194	22.02
$,, females \dots$	218	27.77
" animals	412	24.73
Mature males	687	77.98
" females	567	72.23
" animals	1,254	75.27

a. South Georgia.

Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less) , 2. (71 feet to and incl. 85 feet) , 3. (above 85 feet)	61	$ 48.44 \\ 47.65 \\ 3.91 \\ 100.00 $
Immature males	$\frac{39}{54}$	73.58 72.00
" animals	93	72.66
Mature males , females	$\frac{14}{21}$	$\begin{array}{c} 26.42\\ 28.00 \end{array}$
" animals	35	27.34

	Number of whales.	Per cent
Group 1. (55 feet and less)	22	2.23
" 2. (56 feet to and incl. 65 feet)	$4\overline{72}$	47.82
" 3. (above 65 feet)	493	49.95
	987	100.00
Immature males	133	27.71
"females	180	35.50
" animals	313	31.71
Mature males	347	72.29
,, females	327	64.50
,, animals	674	68.29

Fin-whales.

b. Antarctic, pelagic whaling.

Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less), ,, 2. (71 feet to and incl. 85 feet)	818	4.27 89.50
" 3. (above 85 feet)	<u> </u>	$\frac{6.23}{100.00}$
Immature males	110 151	$25.64 \\ 31.13$
" animals	261	28.56
Mature males	$\begin{array}{c} 319\\ 334 \end{array}$	$74.36 \\ 68.87$
" animals	653	71.44

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)	$\begin{array}{c}3\\183\\493\end{array}$	0.44 26.95 72.61	
	679	100.00	
Immature males	$\begin{array}{c} 61\\ 38\end{array}$	$15.21 \\ 13.67$	
" animals	99	14.58	
Mature males	34 0 24 0	84.79 86.33	
" animals	580	85.42	

Table No. 8.—Average production of oil per blue-whale unit in the Antarctic in the season 1944/45.

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	658.2	73,397	111.5	
Antarctic, pelagic whaling	No. 1	1,253.8	148,000	118.0	

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

Table No. 9.—Whale foetuses measured in the Southern Seas in the season 1944/45.

Date when	Lei	ngth.	(1	Date	Lei	ngth.	a .	Dat		Ler	ngth.	9
measured.	Mother.	Foetus.	Sex.	when measured.	Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.
	Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
²⁹ / ₁₁ 44	80	11'0"	M	¹⁹ / ₁₂ 44	84	9' 6″	F	3/1	45	85	8'0"	F
³⁰ /11 ,,	86	6' 0"	M	,, ,,	83	3' 0"	F	,,	,,	85	6' 0"	\mathbf{F}
,, ,,	87	10'0"	M	²⁰ / ₁₂ ,	82	9'0"	M	,,	"	83	10'0"	M
¹ / ₁₂	81	5'0''	F	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	80	3'6"	F	4/1	,,	81	8'0"	M
2/19	77	3' 0''	M	,, ,,	78	7'0''	\mathbf{F}	1	,,	79	6' 0"	\mathbf{F}
/12 11	83	5' 0''	F	,, ,,	88	7'0''	\mathbf{F}	6/1	,,	76	5'0''	\mathbf{F}
[*] /12 ,	79	6'0"	M		84	10' 0"	M	7/1	,,	76	9 ′ 0″	F
⁵ /12 ,,	88	6'0"	M	21/	83	6' 0"	\mathbf{F}		,,	87	13'0''	M
	90	5'0''	\mathbf{F}	$\binom{12}{12}, \frac{12}{12}, \frac{12}{12}, \frac{12}{12}, \frac{12}{12}$	81	7' 0″	\mathbf{F}	8/1	,,	87	5'0''	M
$\frac{6}{12}$,	85	8' 0"	M	,, ,,	79	7'0"	Μ	9∕1	,,	80	3' 6''	\mathbf{F}
,, ,,	84	6'0''	\mathbf{F}	,, ,,	83	5' 0''	\mathbf{F}	,,	,,	78	8' 0"	\mathbf{F}
·· ··	86	5'0''	M	,, ,,	83	8'0"	Μ	,,	,,	89	8' 0"	F
., .,	81	9'0''	\mathbf{F}	²³ / ₁₂ ,,	85	13' 0"	F	10/1	,,	75	9' 0"	M
7/12 ,,	78	3' 0''	M	24/10 "	78	9′ 0″	M	,,	,,	77	8' 0"	F
⁸ /12 ,,	90	0' 10"	\mathbf{F}	/12 ,	83	7' 0"	Μ	,,	,,	89	4'0"	M
$^{11}/_{12}$,,	79	5'0''	M	$\frac{26}{12}$,	79	6' 0"	M	,,	,,	79	6'0"	F
,,, ,,	81	5'0''	M	** **	84	5' 0"	M	11/1	,,	78	5'0"	M
$\frac{12}{12}$, "	77	3' 0"	M	²⁷ / ₁₂ ,,	79	4'6''	M			86	<i>{</i> 13′0″	M
$\frac{13}{12}$,	78	4' 0″	F	,, ,,	89	8'0"	M	**	"		15'0''	M
$\frac{14}{12}$,	88	25'0''	M	.,, ,,	82	9'0"	M	$\frac{12}{1}$,,	84	9'0"	F
,, ,,	80	7'0"	M	$^{28}/_{12}$,,	81	13'0"	M	1.27	,,	80	5'0''	M
,;, ;; 15/	83	8'0″	F	»», »»	86	15'0"	M	13/1	,,	90 50	17'0"	F
	86	8'0"	F	²⁹ / ₁₂ ,,	79	5'0"	M	,,	,,	78	10' 0'' 6' 0''	M F
16/12 ,	83	5'0''	F	,, ,,	84	6' 0" 8' 0"	F	14/1	,,	81	60 5'0″	r M
»» »»	85	$\frac{12'0''}{8'0''}$	F F	,, ,,	85	8'0' 5'0″	M F	14/1	••	82 78	8'0"	M
» »	83 83	8 0 7′ 0″	г М	,, ,, 30/	84	0' 0"	r M	"	"	82	80 13'0″	M
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	83 82	2'6''	F III	⁰⁰ /12 ,,	$\begin{array}{c} 79 \\ 86 \end{array}$	10 0 9'0"	F	15%	"	82 84	13'0'' 12'0''	F
11/12 ,,	$\frac{82}{78}$	$\frac{2}{4'0''}$	г М	,, ,, ,, 31/	80 81	90 7'0″	F	13/1	••	75^{84}	$\frac{12}{6'0''}$	M
»» »	89	$\frac{4}{5'0''}$	M	$\frac{31}{12}$,,	75	6'0"	F	16/1	"	87	8'0"	9
.,, ,,	$\frac{89}{85}$	5'0"	F	\ddot{i}_{1} $\ddot{45}$	81	5'0"	M	$\frac{18}{1}$	"	75	9' 0"	F
18/12 ,,	89 89	13'0"	F		85	12'0''	F	19/1	••	85	3'0"	F
** **	89 87	5'0''	M	$\frac{2}{2}_{1}$,	84	$\frac{12}{5'0''}$	M	/1	"	80	5'0"	F
** **	92	5 0 6'0"	M		84	5'0"	F	21/1	"	88	6'0"	M
» »	04	00	i tati î	,, ,,	1 01	00	(J.)	/1	,,	1 00 1	001	1 1.1

Blue-whale foetuses.

Date when	Lei	ngth. Sex.		Date when	Lei	Length.		Date when	Lei	ngth.	Sex
measured.	Mother.	Foetus.	. SCA.	measured.	Mother.	Foetus.	Sex.	measured.	Mother.	Foetus.	DUA
	Engl. ft.	Engl. tf.			Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$^{23}/_{1}$ 45	76	10'0"	\mathbf{F}	⁶ /2 45	80	16' 0"	М	$^{28}/_{2}$ 45	81	11'0"	Μ
²⁶ /1	80	10'0"	Μ	$\frac{7}{2}$,	81	6'0"	Μ		82	12'0"	\mathbf{F}
27/ , 1 ,,	78	9' 0"	\mathbf{F}	$\frac{11}{2}$,	81	4'0''	\mathbf{F}	3/3 ,,	83	12'0"	M
	85	3' 0"	\mathbf{F}	$\frac{13}{2}$,,	79	12'0''	\mathbf{F}	$\frac{4}{3}$,	86	6'0"	M
²⁸ / ₁ ,,	89	12'0''	Μ	,, ,,	84	14' 0"	\mathbf{F}	", ",	83	17' 0"	\mathbf{F}
,, ,,	84	13'0''	F	$^{14}/_{2}$.,	85	12'0"	M	°/3 ,,	81	6' 0"	F
,, ,,	80	10' 0"	M	,, ,,	87	10'0"	F	<u>.</u> , ,,	92	16'0"	M
", "	86	18'0"	M	,, ,,	79	12'0''	\mathbf{F}	7/3 ,,	85	6'0''	M
²⁹ / ₁ , ,	88	20' 0"	M	, ,,	85	7'0"	F	⁸ / ₃ ,,	81	16'0''	M
30/1 ,,	77	8'0"	M	$\frac{15}{2}$,	84	8'0"	M	$\frac{10}{3}$,	87	8'0"	M
·· ··	78	8'0"	M	,, ,, 16/	82	$\frac{4'0''}{1c'0''}$	F	$\frac{11}{3}$, ,	95	24' 0"	F
·· ··	78	$\frac{6'0''}{8'0''}$	M F	$\frac{16}{2}$,	88	16'0''	M	$\frac{12}{3}$,,	84	$15' 0'' \\ 22' 0''$	F F
³¹ / ₁ ,,	$\frac{81}{84}$	8'0"	M	,,, ,,	83 86	14'0'' 14'0''	F F	·· ··	91 91	16'0"	F
1/ **	86	$\frac{80}{14'0''}$	M	$\frac{17}{2}$,	80	14'0'' 12'0''	M	"""""" 27	78	$\frac{10}{20'0''}$	F
$\frac{1}{2}$,	80	$\frac{14}{8'0''}$	F	$\frac{18}{2}$,	80	12.0 15'0''	M	$\frac{2}{4}$,	78	$\frac{20}{15'0''}$	F
·· ··	78	8'0″	M	21/2 ,	84	13 0 17′ 0″	F	$\frac{5}{4}$, , $\frac{9}{4}$, ,	84	17'0"	F
$\frac{2}{2}$,	80	7′0″	M	$23^{/2}$,	88	8'0"	F		86	18'0"	M
6/2	84	11'0"	F	$\frac{27}{2}$,	82	17'0"	M	¹³ / ₄ ,,	75		F

Table No. 9.—Blue-whale foetuses (cont.).

Total 159 blue-whale foetuses, of which 81 males and 77 females Sex was not stated for 1 foetus. Of the 158 foetuses for which sex was stated 51.27 per cent were males and 48.73 per cent females.

Fin-whale foetuses.

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 73\\71\\70\\67\\70\\71\\78\\69\\68\\70\\73\\74\\74\\73\\73\\72\\72\end{array}$	3'0'' F 5'0'' F 3'3'' F 3'6'' F 2'9'' F 3'9'' M 3'0'' F 3'0'' M 4'0'' M 1'0'' F 5'0'' F 4'0'' M 4'6'' M 5'9'' F 5'0'' F 5'0'' F 5'0'' F	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{bmatrix} 74\\ 80\\ 69\\ 76\\ 78\\ 75\\ 68\\ 71\\ 74\\ 70\\ 73\\ 72\\ 66\\ 65\\ 74\\ 73\\ 72\\ 73\\ 72\\ 73\\ 72\\ 73\\ 72\\ 73\\ 72\\ 73\\ 73\\ 72\\ 73\\ 73\\ 73\\ 72\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73\\ 73$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 67\\ 69\\ 67\\ 73\\ 70\\ 70\\ 71\\ 68\\ 69\\ 67\\ 74\\ 71\\ 77\\ 71\\ 67\\ 74\\ 71\\ 76\end{array}$	5'0" M 5'0" F 4'3" M 6'0" F 8'0" M 9'0" F 3'0" M 8'0" F 5'0" M 10'9" F 9'3" M 5'6" F 9'0" F 9'0" F 9'0" F 7'0" M 10'0" F 8'0" M
$\frac{9}{9}/12$, , , , , , , , , , , , , , , , , , ,	66 70 74 70 72 72 66 69 75 76 67 72 73	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \begin{array}{c} 29 \\ 12 \end{array} \\ \end{array} \\ \begin{array}{c} 30 \\ 12 \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	$\begin{array}{c} 65\\ 73\\ 72\\ 69\\ 68\\ 68\\ 69\\ 73\\ 74\\ 72\\ 70\\ 68\\ 71\\ \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	24/1 ,, ;; ;; ;; ;; ;; ;; 25/1 ,, ;;	$\begin{array}{c} 67\\79\\73\\70\\76\\72\\69\\74\\73\\72\\72\\71\\75\end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

	LO	ngth.	Sex.	Dat		Le	ngth.	Sex.	Date when	Lei	ngth.	Sex.
when measured.	Mother.	Foetus.	Sex.	whe measu		Mother.	Foetus.	Sex.	measured.	Mother.	Foetus.	bex.
	Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.			Engl. ft.	Engl. ft.	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 70\\ 73\\ 66\\ 73\\ 68\\ 73\\ 66\\ 75\\ 67\\ 66\\ 67\\ 70\\ 74\\ 73\\ 73\\ 70\\ 73\\ 67\\ 66\\ 64 \end{array}$	5'0''' 9'0'''' 5'0'''''''''''''''''''''''''''''''''''	M F M M F F F F F M M F M F M F M F M F	$\begin{array}{c} 7/2 \\ 9/2 \\ 10/2 \\ 12/2 \\ 13/2 \\ 14/2 \\ 15/2 \\ \vdots \\ 16/2 \\ \vdots \\ 16/2 \\ \vdots \\ 17/2 \\ 18/2 \\ 21/2 \\ 21/2 \\ 21/2 \\ \vdots \\ \end{array}$	45 ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	$\begin{array}{c} 76\\ 69\\ 73\\ 65\\ 69\\ 74\\ 67\\ 73\\ 66\\ 69\\ 72\\ 71\\ 72\\ 71\\ 77\\ 74\\ 71\\ 68\\ 67\\ 70\\ \end{array}$	$\begin{array}{c} 7'0'' \\ 5'0'' \\ 4'0'' \\ 6'0'' \\ 8'0'' \\ 14'0'' \\ 8'0'' \\ 6'0'' \\ 14'0'' \\ 14'0'' \\ 13'0'' \\ 11'0'' \\ 13'0'' \\ 13'0'' \\ 13'0'' \\ 11'0'' \\ 11'0'' \\ 11'0'' \\ 11'0'' \end{array}$	MFFFFFMMMFMMFFMFMMFM	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c} 66\\ 71\\ 71\\ 74\\ 75\\ 68\\ 71\\ 68\\ 71\\ 68\\ 71\\ 72\\ 74\\ 69\\ 71\\ 71\\ 73\\ 67\\ 69\\ 69\\ 69\\ 69\\ \end{array}$	$\begin{array}{c} 9'0'' \\ 3'0'' \\ 12'0'' \\ 7'0'' \\ 3'0'' \\ 13'0'' \\ 12'0'' \\ 13'0'' \\ 11'0'' \\ 6'0'' \\ 11'0'' \\ 15'0'' \\ 3'0'' \\ 15'0'' \\ 3'0'' \\ 15'0'' \\ 15'0'' \\ 3'0'' \\ 15'0'' \\ 13'0''' \\ 13'0'' \\ 13'$	FFFFMMMMFFMFMFMMMFF

Table No. 9.—Fin-whale foetuses (cont.).

Total 159 fin-whale foetuses, of which 72 males and 87 females, or 45.28 per cent males and 54.72 per cent females.

Sei-whale foetuses.

$\frac{15}{2}$ 45 $\frac{17}{2}$ " $\frac{17}{2}$ " $\frac{18}{2}$ " $\frac{21}{2}$ " $\frac{22}{2}$ " "	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	4' 6" F 7' 0" M 4' 0" F 7' 0" F 11' 0" F 9' 0" F 10' 6" F 9' 9" M	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\left \begin{array}{c} 51\\ 53\\ 54\\ 53\\ 56\\ 53\\ 54\\ 53\\ 54\\ 53\\ 54\\ 53\\ \end{array}\right $	6'0" F 8'0" M 11'0" F 6'0" F 9'9" M 9'0" F 10'0" M 11'3" F	$\left \begin{array}{c} 11/_{3} & 45\\ 15/_{3} & , \\ 22/_{3} & , \\ 5/_{4} & , \\ 22/_{4} & , \\ 29/_{4} & , \\ , & , \\ 29/_{5} & , \\ 21/_{5} & , \\ 21/_{5} & , \\ \end{array}\right $	$53 \\ 50 \\ 50 \\ 48 \\ 53 \\ 51 \\ 56 \\ 51$	10' 6" F 10' 0" M 11' 0" M 9' 0" F 13' 6" M 8' 0" F 10' 6" F 10' 6" M
** **	1 00	99 M	1/3 ,,	00	11 5 r	-/5 ,,	01	100 m

Total 24 sei-whale foetuses, of which 9 males and 15 females, or 37.50 per cent males and 62.50 per cent females.

Humpback foetuses.

21/2 ,, 2/3 ,, 9/4 ,,	$45 \\ 45 \\ 43 \\ 44 \\ 49$	0' 7" M 3' 0" F 1' 9" F 6' 3" M 6' 6" F	14/4 ,, 16/4 ,,	45 ,, ,, ,,	$ \begin{array}{r} 47 \\ 48 \\ 48 \\ 44 \\ 45 \end{array} $	$5' 0'' \\ 4' 6'' \\ 6' 0'' \\ 8' 0'' \\ 6' 0''$	F F F F	$\frac{16}{4}$ 45 $\frac{17}{4}$,, ,, ,, ,,	$46 \\ 41 \\ 48$	5'0'' 5'0'' 4'9''	M M F
Total	13	humphack +	footusog	of	which /	1 males	and	9 females	or 30	77 ner	cent

Total 13 humpback foetuses, of which 4 males and 9 females, or 30.77 per cent males and 69.23 per cent females.

Table No.	10Size of pregnant whale females caught in the Southern
	Seas in the season 1944/45.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	Number of foetuses mea-
Engl. feet.		Engl. feet.		sured 159 of which twin pair 1
75	5	86	11	I
76	3	87	7	Total number of blue-whale fe-
77	4	88	7	males measured 560, of which
78	15	89	6	pregnant animals 158, or 28.21
79	11	90	3	per cent. Total number of mature
80	12	91	2	blue-whale females (above 76 feet)
81	15	92	2	measured 355, of which preg-
82	9	95	1	nant animals 150, or 42.25 per
83	14			cent.
84	18			
85	13	Total	158	

Blue-whale females.

Fin-whale females.

$egin{array}{c} 64\\ 65\\ 66\\ 67\\ 68\\ 69\\ 70\\ 71\\ 72 \end{array}$	$ 1 \\ 4 \\ 9 \\ 14 \\ 11 \\ 15 \\ 15 \\ 20 \\ 15 \\ 15 $	74 75 76 77 78 79 80	$ \begin{array}{c} 14 \\ 7 \\ 5 \\ 2 \\ 2 \\ 1 \\ 1 \end{array} $	Number of foetuses mea- sured 159 Total number of fin-whale fe- males measured 785, of which pregnant animals 159, or 20.25 per cent. Total number of mature fin-whale females 567, of which pregnant animals 158, or 27.87
73	23	Total	159	per cent.

Humpback females.

$41 \\ 43 \\ 44 \\ 45$	$\begin{array}{c}1\\1\\2\\2\end{array}$	$\begin{array}{c} 47\\48\\49\end{array}$	1 3 1	Number of foetuses mea- sured 13
46	1	Total	13	

Sei-whale females.

48 50 51 52	1 4 4 2	54 56	$\frac{3}{2}$	Number of foetuses mea- sured
53	3 7	Total	24	

Table No. 11.—Whale foetuses measured in the Southern Seas in the season 1944/45, by species and groups of size, in each month.

Groups of size.	Nov.	Dec.	Jan.	Febr.	March.	April.	Total.
Engl. feet.							
Less than 1'	-	1	-		_	_	1
$1' - 1' 11'' \dots \dots \dots$	-	-	-		-	-	-
2'— $2' 11''$		1			-	-	1
$3' - 3' 11'' \dots		5	2	-	_	-	7
$4' - 4' 11'' \dots \dots \dots \dots \dots \dots \dots$	-	3	1	2	-	-	6
$5' - 5' 11'' \dots \dots$	-	14	9	-	-	-	23
$6' - 6' 11'' \dots	1	8	7	1	3	-	20
7' 7' 11"		8	-	2	-		10
8' 8' 11"		7	12	4	1	-	24
9′— 9′ 11″		6	5			-	11
$10'-10' 11'' \dots \dots \dots \dots \dots \dots \dots \dots$	1	2	5	1	-	-	9
11′—11′ 11″	1	-		2	-	1	4
12'-12'11''		1	3	5	1	_	10
13′—13′ 11″		3	4	~	-	-	7
14'-14'11''				4	-		4
15′—15′ 11″		1	1	1	1	1	5
16′—16′ 11″		-		2	3		5
17′17′ 11″			1	2	1	1	5
18′—18′ 11″		-	1		-	1	2
19′19′ 11″				~		-	
20′—20′ 11″			1	-	-	1	2
21′—21′ 11″					-	-	
22'-22'11''			-		1		1
23′—23′ 11″		~			-		
24'-24'11''		-			1	-	1
25'-25' 11"		1			-	-	1
Total blue-whale foetuses	3	61	-52	26	12	5	159
Average size of foetuses	9′	$\tilde{7}'$	8'7"	11'1"		-	9'

Blue-whale foetuses.

Fin-whale foetuses.

		1		1	1	1	
Less than 1'	-	1	-	-	-	-	1
1′— 1′ 11″	-	7	-	-	-	-	7
2'— $2' 11''$		6	3	1	-	-	10
$3' - 3' 11'' \cdots	3	10	7	1	2	-	23
$4' - 4' 11'' \dots \dots \dots \dots$		8	4	3	-	-	15
$5' - 5' 11'' \dots \dots$	1	7	10	6	1		25
$6' - 6' 11'' \dots \dots$	1	5	5	4	1	-	16
$7' - 7' 11'' \dots \dots \dots \dots$	-	5	6	3	1	-	15
8′— 8′ 11″		-	6	4	1	-	11
9′— 9′ 11″	-	1	8	2	1	-	12
$10'-10' 11'' \dots \dots \dots$		_	3	-	-	-	3
11′—11′ 11″	-	-	1	3	3	-	7
12'-12'11''	-	-	1	1	1	-	3
13′—13′ 11″	-		-	2	2	1	5
14′—14′ 11″	-	-	_	2	-	-	2
15'-15'11''		-	1	-	3	-	4
Total fin-whale foetuses	$\overline{5}$	50	55	32	16	1	159
Average size of foetuses	4'	3′ 9″	6' 5"	7′ 6″	9' 9"	13'	6' 1"

Humpback	foetuses.

Groups of size.	Jan.	Febr.	March.	April.	Total.
Engl. feet.					
Less than 1'	1	_	-	_	1
1′—1′ 11″	_	-	1	-	1
2'-2'11''	-	-			_
3′—3′ 11″	-	1	-	-	1
4'-4'11''	-			2	2
5'-5'11''	-			3	3
6'-6'11''	_			4	4
8′—8′ 11″	-			1	1
Total humpback foetuses	1	1	1	10	13
Average size of foetuses	$\hat{6}''$	$\overline{3}'$	$\hat{1}'$	$5'\tilde{6}''$	4'7''

oer whats foetuses	Sei-w	hale	foetuses.
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Groups of size.	Jan.	Febr.	March.	April.	May.	Total.
Engl. feet.						
$4' - 4' 11'' \dots$		2	-	_	_	2
5'- 5' 11"		-		-		
$6' - 6' 11'' \dots	-	1	1	-		2
7'— $7' 11''$	-	2		-	-	2
8′— 8′ 11″		1	_	1	-	2
9' 9' 11"		$\tilde{2}$	2	1	_	5
10′—10′ 11″	-	ī	$\frac{-}{3}$	ĩ	1	6
11′—11′ 11″	_	$\frac{1}{2}$	2	_	_	4
12'-12' 11"	_		_	_	_	_
$13'-13' 11'' \dots$	_	_	_	1	-	1
10-10 11						T
Total sei-whale foetuses	-	11	8	4	1	24
Average size of foctuses	_	7'6''	$9'{}^{5''}$	10'	10'	8'9

Table No. 12.—Whale foetuses, by species and sex, in each month in the season 1944/45.

Antarctic.

Kind of foetuses and months.	Number of		Sex not	Total	Number of males per 109 females.	
And of focuses and months.	males. females.		stated.	foetuses.		
Blue-whale foetuses.						
November December January February March April	$ \begin{array}{r} 3 \\ 32 \\ 27 \\ 12 \\ 6 \\ 1 \end{array} $		- 1 -	$egin{array}{c} 3 \\ 61 \\ 52 \\ 26 \\ 12 \\ 5 \end{array}$		
Total	81	77	1	159	105	

Table No. 12 (continued).

Kind of foetuses and months.	Number of		Sex not	Total	Number of males per 100	
Kind of foetuses and months.	males.	females.	stated.	foetuses.	females.	
Fin-whale foetuses.						
November December January	$\begin{array}{c}1\\21\\26\end{array}$	$\begin{array}{c c} 4\\ 29\\ 29\\ 29\end{array}$	-	5 50 55	25 72 90	
February March	$14\\10$	18 6	-	32 16	78 167	
April		87		$\frac{1}{159}$		
Humpback foetuses.						
January February	1 -	- 1	-	1 1	-	
March April	-3	1 7	-	$1 \\ 10$	$\overline{43}$	
Total	4	9		13	44	
Sei-whale foetuses.						
February March April May	3 4 1 1	8 4 3 -		$11\\ 8\\ 4\\ 1$	38 100 33 -	
\mathbf{Total}	9	15	-	24	60	

