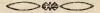
WHALING STATISTICS XXI

EDITED BY

THE COMMITTEE FOR WHALING STATISTICS



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INTERNATIONAL WHALING STATISTICS XXI

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PREFACE

The present publication (No. XXI) contains statistics for the Antarctic season 1946–47 and for the whaling on other grounds during 1947. International Whaling Statistics No. XIX concerned whaling in the Antarctic 1945–46 and on other grounds in 1946, but since its publication the Committee has received additional information concerning the catch from British Columbia, Kamtchatka, the Faroe Islands and New Zealand. These data have been included in the tables in the present volume and the previous totals have been corrected accordingly. In the introduction will be found special remarks about the corrections made.

According to newspaper reports the Sovjet-Russian floating factory "Aleut" has been operating off Kamtchatka during 1947, and a Brazilian company off the coast of Brazil. The Committee has not succeeded in obtaining statistics concerning these operations, but otherwise publication No. XXI should contain complete information about all whaling in the Antarctic 1946–47 and on other grounds for 1947.

The Committee desires once more to request all active whaling companies to send in statistical data on their whaling results and the floating factories and catchers engaged, in accordance with the rules laid down in the International Whaling Agreement.

Oslo, 20th March 1949.

Gunnar Jahn. Birger Bergersen. Harald B. Paulsen.

INTRODUCTION

As mentioned in previous volumes of International Whaling Statistics, preparations to resume the whaling activity were taken up already before the end of the war. The world was greatly in need of fats and it was therefore of the greatest importance to resume the oil production as soon as possible. The floating factories and catchers which survived the war were repaired and re-converted and new factory ships and catchers were built to replace the lost whaling fleet. As the Antarctic whaling yields the largest output of oil, it was natural in the first place to concentrate on the rehabilitation of the Antarctic whaling. In waters outside the Antarctic, whaling activity has been gradually resumed, though at a less rapid rate.

During the season 1945-46 3 shore stations, 9 floating factories and 93 catchers participated in the Antarctic whaling, and 818,652 barrels of oil were produced. During the season 1946-47 3 shore stations, 15 floating factories and 147 catchers were engaged, and the oil production amounted to 1,939,742 barrels. It will be observed that the increase in the oil production is greater than might be expected from the increase in the whaling fleet. This is due to the fact that during the season 1946-47 all floating factories but one commenced operations on the opening day—December 8th—and the factories had practically full equipment of catchers from the start. As regards the season 1945-46, owing to the comprehensive repairs, only one floating factory commenced activity on the opening day—November 24th. Some of the factory ships commenced whaling in December, while one did not start until January 17th. Conditions were even worse in respect to the catchers, as these arrived still later at the grounds. Consequently, several of the floating factories were compelled to operate with a reduced number of catchers for a long period during the season 1945-46. During the season 1946-47 weather conditions in the Antarctic were also particularly favourable, while the weather during the previous season on the whole had been unfavourable.

Publication No. XX comprised the Antarctic whaling 1946–47 and the introduction to this volume contained particulars in respect to the whaling operations.

In waters outside the Antarctic 28 shore stations, 2 floating factories and 77 catchers were operating in 1946, and 129,759 barrels of oil were produced. In 1947 29 shore stations, 5 floating factories and 107 catchers carried on whaling, with a total yield of 243,972 barrels of oil. The increase in the oil output in 1947 amounts to 114,213 barrels, chiefly owing to the increased whaling material. Thus, 2 floating factories commenced sperm-whale catching off Peru in 1947, and produced 105,986 barrels of sperm-oil. Further one company commenced operations from the Cape Colony and one from California. The Depart-

Table a.—Whaling material in operation in the years 1933/34—1946/47.

	All w	haling gro	unds.		Antarctic.			Others.	rs.	
Years.1	Shore stations.	Floating factories.	Catchers.	Shore stations.	Floating factories.	Catchers.	Shore stations.	Floating factories.	Catchers.	
1933-34 1934-35 1935-36 1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44	15 18 37 29 35 14 7 7 7 7	23 30 33 41 35 37 29 14 2 1	199 242 312 354 356 358 305 174 33 29 29 32	2 2 2 2 2 2 2 2 2 2 1 2 1 2 1	19 23 24 30 31 34 28 11 -	126 153 175 196 256 281 240 93 12 6 15	13 16 35 27 33 12 5 6 5 6 7	7 9 11 4 3 1 3 2	73 89 137 158 100 77 65 81 21 23 14	
1945–46 1946–47	$\begin{array}{c} 31 \\ 32 \end{array}$	11 20	$170 \\ 254$	3 3	9 15	93 147	28 29	2] 5	77 107	

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

ment of Commerce and Agriculture in Australia has reported of the activities of one shore station in 1947. Only 4 humpbacks were killed, yielding 40 barrels of oil.

In 1947 whaling was carried on from the following grounds:

Coast of Natal and Cape Colony — Coast of Brazil — Azores — Madeira — Coast of Portugal — Coast of Norway — Faroe Islands — Coast of West Greenland — New Foundland — California — Coast of Chile and Peru — Coast of Kamtchatka — Coast of Japan — Bonin Island — West Australia — New Zealand.

As mentioned in the preface, no statistical reports have been received from the two grounds, coast of Brazil and coast of Kamtehatka.

Table b.-Whales killed in the years 1927/28-1946/47, by species.

Years.¹)	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.
1927–28	9,676	7,203	1,526	2,290	1,804	1,094	23,593
1928–29	13,905	$9,\!270$	350	1,549	1,862	1,179	$28,\!115$
1929-30	19,166	14.378	2,036	841	1,212	667	38,300
1930-31	29,649	11.367	924	652	517	21	43,130
1931–32	6,705	4,158	635	492	632	366	12.988
1932-33	19,067	7.089	501	433	1.234	583	28,907
1933–34	17,486	8,734	2,289	541	1,847	1,689	32,586
1934–35	16,834	14,078	4,088	962	2,238	1,111	39,311
1935–36	18,108	12,155	7,776	823	4,853	1,153	44,868
1936–37	14,637	17,687	9,853	1.236	7,055	911	51,379
1937–38	15,035	29,680	$5,\!125$	929	3,308	758	54,835
1938–39	14,152	22,622	1,393	815	5,049	1,679	45,710
1939–40	11,560	19,722	454	538	4,041	1,316	37,631
1940-41	5,028	9,150	2,939	807	5,081	574	23,579
1941–42	69	1,751	276	118	3,928	728	6,870
1942–43	136	1.494	$\frac{219}{219}$	154	3,920	871	6,794
1943–44	351	1,828	218	255	895	418	3,965
1944–45	1.101	2 448	$\frac{210}{292}$	144	861	521	5 367
1945–46	3,675	10,980	493	$7\overline{47}$	3,418	22	19.335
1946-47	9.301	16,491	274	1,117	7,395	56	34,634

 $^{^{1})}$ 1927-28 = Antarctic season 1927/28 and summer 1928, a.s.o.

Table c.—Whales killed in the different main areas 1933/34—1946/47.

	All are	as.	Antaretie.		Nort Atlan and Arc	tic	Afric	a.	Pacifi nort		Japa	n.	Other	rs.
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	32 586	100	26,087	80 I	583	1.8	2,392	7.3	1,019	3.1	1,436	4.4	1,069	3.3
1934-35			31,808			1.4	3,004	7.7	855	2.2	1,787	4.5	1,289	1 -
1935-36			30,991		722	1.6	3,768	8,4	857	1.9	1,840	4.1	6,690	1
1936-37			34,579		1,910		3,966	7.7	730	1.4	2,066		8,128	
1937-38	54,835				750	1.4	3,044	5.6	483	0.9	1,970	3.6	2,549	
1938-39	45,710	100			802		2,687	5.9	232	0.5	2,280	5.0	1,353	
1939-40	37,631	100	32,900	87.4	78	0.2	1,035	2.8	922	2.4		5.4	661	1.8
1940-41	23,579	100			133	0.6	759	3.2	931	3.9	2,349	10.0	3,044	12.9
1941-42	6,870	100	1,425	20.7	181	2.6	498	7.3	189	2.8	_	_	4.577	66.6
1942-43	6,794	100	998	14.7	315	4.6	724	10.7	120	1.8	_	_	4,637	68.2
1943-44	3,965	100	1,799	45.4	411	10.4	819	20.6	5	0.1			931	23.5
1944-45	5,367	100	2,891	53.9	585	10.9	729	13.6	_	_		-	1,162	
1945-46	19.335				1,145		984	5.1	113	0.6	1,750	9.1	1,956	
1946-47	34,634	100	25,593	73.9	1,063	3.1	1,406	4.0	402	1.2	1,642	4.7	4,528	13.1

Table d.—Oil production in the years 1933/34—1946/47.

	All whalin	g grounds.			Principal	grounds.		
Years.	An wham	ig grounds.	Anta	rctic.	NorthAtlant	tic and Arctic	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	2,453,999	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	2,658,108	13,562	69,144	1,921	169,772	4,353
1937–38	3,640,248	10,225	3,340,330	13,048	22,097	1,004		6,323
1938 – 39	3,010,098	8,408	2,820,771	10,038	26,066	1,241		5,085
1939-40	2,666,522	8,743	2,544,253	10,601	2,950	2,950		3,674
1940-41	1,266,455	7,278	1,100,008	11,828	1,855	1,855	26,638	5,328
1941-42	201,570	6,108	77,819	6,485	²) 1,855	1,855	19,740	3,948
1942-43	193,473	6,671	50,960	8,493	5,564	2,782	27,373	5,475
1943-44	197,058	6,795	132,001	8,800	8,963	2,241	29,380	$5,\!876$
1944-45	297,954	9,311	223,540	14,903	14,121	1,569	23,189	4,638
1945-46	948,411	5,579	818,652	8,803	36,691	2,158	30,552	3,819
1946-47	2,183,714	8,597	1,939,742	13,196	35,757	1,703	47,677	2,649
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	ļ	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		93.7		0.9		3.5
1939-40		100.0		95.4		0.1		1.5
1940-41		100.0		86.9		0.1		2.1
1941-42		100.0		38.6		0.9		9.8
1942-43		100.0		26.3		2.9		14.1
1943-44		100.0		67.0		4.5		14.9
1944-45		100.0		75.0		4.7		7.8
1945-46		100.0		86.3		3.9	1	3.2
1946-47		100.0		88.8		1.6		2.2

 $^{^{1})\ \}mathrm{Barrel}=^{1}/_{6}\ \mathrm{ton}\ (1\ \mathrm{ton}=1{,}016\ \mathrm{kg}).$ $^{2})\ \mathrm{Calculated}.$

Table e.—Sperm-oil production in the years 1935/36-1946/47.1)

Grounds.	2)1935-36	1936-37	1937-38	1938-39	1939-40	1940-41	1945-46	1946-47
	Barrels	Barrels	Barrels	Barrels	Barrels	Parrels	Barrels	Barrels
South Georgia	126	3,707	2,656	6,971	4,245	1,400	2,686	5,987
Antarctic, pelagic	23,629	49,453	48,911	144,775	102,710	44,792	11,059	66,054
Coast of Africa:							·	
Coast of Natal	26,908		15,623	16,083	14,672	13,573	19,334	14,272
Cape Colony	4,350	8,146	_	_	_	-	-	1,485
South of Madagascar		_	1,210	1,291	_	-	_	_
Coast of Congo	1,367	-	_	_	-	_	-	_
Atlantic and Arctic:					ĺ			
Azores	_	_	_	³) –	³) –	3) –	11,917	12,974
$\operatorname{Madeira} \ldots \ldots$	_	_	-	_	_	-	2,565	2,585
Coast of Portugal	_	_	³) –	_		3) –	645	1,080
Coast of Norway	1,092	1,548			_	-	1,059	
Faroe Islands	572	695	251	558	_	-	578	621
$\operatorname{Iceland} \ldots \ldots$	257	1,136	1,048	183	-	-	_	_
South of Iceland, pelagic	_	1,690	_	_	_	_	_	_
Davis Strait, pelagic	_	11,173				-	-	_
New Foundland	914	825		840	-	-	649	1,212
Pacific North:								
Alaska	3,873	3,365	3,638	2,655	-	-	_	_
British Columbia	15,237	13,459	11,522		(4)5,040	4) 9,550	_	_
California	112	_			_	27	_	140
Pelagic whaling	_	_			6,281	5,570	118	736
Coast of Peru	49,880		12,869	_	_	41,359	_	105,986
Coast of Chile	2,640		⁴) 5,735	4,213		-	12,499	19,160
Coast of Kamtchatka		4) 9,504		7,904		4) 8,000	⁵) –	-
Coast of Japan	25,031		27,897	10,961	22,280	21,964	3,148	4,862
Coast of West Australia	550	117	_	_		-	-	-
$Total^{1}$)	161,959	238,403	134,896	197,171	$155,\overline{228}$	146,235	66,257	237,995

¹) During the war years 1941/42-1944/45, for which figures are omitted in this table, the total spermoil production was as follows: In 1941-42 85.332 barrels, 1942-43 95,436 barrels, 1943-44 30,999 barrels, and 1944-45 31,303 barrels. ²) 1935-36 = Antarctic season 1935-36 and summer 1936, a.s.o. ³) No information received as to production of sperm-oil. ¹) Calculated. ⁵) 316 Sperm-whales have been caught, but no information has been received re, sperm-oil production.

Table a, on page 8, shows the number of shore stations, floating factories and catchers operating in the Antarctic and on other grounds from and including 1933-34. As mentioned in the preface supplementary information has been received since the publication of volume No. XIX concerning whaling operations and whaling material engaged during the post-war seasons. This table, as well as later tables in the present publication have been corrected on the basis of the new data. The total participation during the season 1946-47 and the summer 1947 comprised 32 shore stations, 20 floating factories and 254 catchers —an increase, compared to the previous season, of 1 shore station, 9 floating factories and 84 catchers. Of the 20 floating factories 15 were operating in the Antarctic and 5 on other grounds. One of the factories operating in the Antarctic, has, however, also carried on whaling outside Antarctic waters, and has been registered in the number of floating factories in both places. This is also the case in respect to the catchers, a few having operated both in the Antarctic and elsewhere. The same method was also used during the pre-war years, as some of the Antarctic factories operated on other grounds during the summer.

Table f.—Whaling results for the various countries 1933/34—1946/47. All areas.

Number of whales killed.

Years.	All countries	Argen- tina.	Brazil.	British Empire.	Chile.	Den- mark.	Ger- many.	Iceland.	Japan.	Mexico.	Norway.	Pana- ma.	Portugal.	Sovjet Russia.	Spain.	United States.	Hol- land.
$Ab solute\ figures:$																	
1933–34	32,586	1,139	-	14,616		123	_	_	1,436		13,657	-	240	339	-	669	_
1934–35	39,311	809	_	17,533	469	117	_	28	2,000	70		-	276	487	-	583	-
1935–36	44,868	944	_	19,919	238	114	-	85	2,479	-	15,670	2,449	480	501	-	1,989	_
1936–37	51,379	1,014	-	21,387	168	1,089	920		4,025		1)15,943	2,389	288	418		3,659	-
1937–38	54,835	1,062	-	19,542	300	208	5,839	147	7,552		¹)15,355	1,527	388	265	-	2,650	_
1938–39	45,710	1,024	-	14,104	407	178	5,066	130	9,820		¹)11,871	907	389	476	_	1,338	-
1939-40	37,631	705	-	13,207		~		-	9,698	-	11,040	1,421	552	_	-	1,008	-
1940-41	23,579	868	-	4,361	-		_		12,920	-	4,362	-	501	543	_	24	
1941-42	6,870	1,066	-	1,162	-		-	-	_	-	3,456	-	606	554	-	26	_
1942–43	6,794	998	-	1,057	-	-	_		-	-	3,462	-	770	478	-	29	-
1943–44	3,965	962	-	1,171	367		_	-	-	-	984	-	476	_	_	5	_
1944-45	$5,\!367$	1,296	-	1,229	487	-	_		-	-	1,787	-	568	-	-	-	
$1945 – 46 \dots$	19,335	1,082	-	6,682	585	175	-	-	1,863	-	7,687	-	795	466	_	-	-
1946–47	34,634	857	_	14,736	790	284	_	-	3,181	_	12,857		735	386	-	38	770
Percentage	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
figures:	70	70	70	70	70	70	70	70	70	70	/0	70	70	/0	,0	,0	70
1933–34	100.0	3.5	-	44.9	1.1	0.4	_	_	4.4		41.9	-	0.7	1.0		2.1	-
1934–35	100.0	2.0		44.6	1.2	0.3	_	0.1	5.1	0.2		-	0.7	1.2	-	1.5	-
1935-36	100.0	2.1	-	44.4	0.5	0.3	-	0.2	5.5	_	34.9	5.5	1.1	1.1	_	4.4	-
1936–37	100.0	2.0	_	41.6	0.3	2.1	1.8	0.2	7.8		31.0	4.7	0.6	0.8	-	7.1	_
1937-38	100.0	1.9	_	35.6	0.5	0.4	10.7	0.3	13.8	-	28.0	2.8	0.7	0.5	-	4.8	_
1938–39	100.0	2.2	_	30.8	0.9	0.4	11.1	0.3	21.5	-	26.0	2.0	0.9	1.0	-	2.9	-
1939-40	100.0	1.9	-	35.1		-		_	25.8	_	29.3	3.8	1.5	-	_	2.6	-
1940-41	100.0	3.7	-	18.5	-	-		_	54.8	_	18.5	-	2.1	2.3	-	0.1	_
1941-42	100.0	15.5	-	16.9	-			_	_	_	50.3	-	8.8	8.1	_	0.4	-
$1942 - 43 \dots$	100.0	14.7	-	15.6	-		_	_	_	_	51.0	-	11.3			0.4	_
1943–44	100.0	24.3	-	29.5	9.3	_	_	_	_	_	24.8	-	12.0	1	_	0.1	-
1944-45	100.0	24.1	_	22.9	9.1	_	-	_	_	_	33.3		10.6		-	_	_
1945-46	100.0	5.6	-	34.6	3.0	0.9	_	-	9.6		39.8	-	4.1	2.4		_	_
1946-47	100.0	2.5	-	42.6	2.3	0.8	_	_	9.2	_	37.1		2.1	1.1	_	0.1	2.2

¹⁾ Including the catch of two Norwegian expeditions hired by Germany—in 1936/37 1,756 whales, in 1937/38 2,158 whales, and in 1938/39 1,658 whales.

Table g.—Whaling results for the various countries 1933/34—1946/47. All areas. Oil production in barrels.1)

Years.	All countries.	Argen- tina.	Brazil.	British Empire.	Chile.	Den- mark-	Ger- many.	Ice- land.	Japan.	Mexi- co.	Norway.	Pana- ma.	Portu- gal.	Sovjet Russia.	Spain.	United States.	Hol- land.
Absolute figures:																	
1933–34	2,588,335	65,790		1,192,478	13,626	3,013		_	22,766		1,253,694		-	12,168		24,800	-
1934–35	2,692,825		-	1,290,096	16,633	2,997		69 L		3,821	1,239,327	_		19,398	-	24,629	_
1935–36	2,873,423	75,192		1,240,361	8,789	3,605		3,415			1,162,742		-	18,238	-	80,991	_
1936–37	3,214,510		-	1,287,627	5,925	79,535							_	16,480		$150,\!433$	_
1937–38	3,640,248		-	1,308,015	8,279				422,036		, -, - ,				-	166,299	_
1938–39	3,010,098		-	1,007,223	5,797	-5,197	374,149	3,764			/			18,854	-	102,388	_
1939-40	2,666,522		-	938,147	-				593,499			113,000		-[-	62,607	_
1940-41	$[1,\!266,\!455]$		-	274,987		-	-	-	674,319	-1	244,676	-		18,235	-	683	****
1941–42	201,570		-	47,745	-	-		-	-	-,	64,500		13,070			948	
1942 – 43	193,473			39,932	-			_	-		72,000		13,880	15,941		760	
1943-44	197,058			40,973					_		82,000		10,073		-	148	_
1944-45	297,954					-	***	-	_		149,391		11,838		-		*****
1945-46	948,411		-	307,048		3,981	_	-	5,837	-			16,016		-		
1946–47	2,183,714	47,830	-	901,597	22,836	6,286	-	_	80,244		991,709	-	19,537	35,000	-	1,365	77,310
Percent-	0.1		0.4		0.1	0.1	0.1	0.1	0.1	0.1	0.7	0/	0/	0.1	0/	0/	0/
	%	%	%	%	%	%	%	%	%	%i	%	%	%	%	%	%	%
$egin{array}{c} age \ figures. \end{array}$																	
	100.0	0		40.1	0.5	0.1			0.0		48.4			0.5		1.0	
1933–34 1934–35	100.0 100.0	$\frac{2.5}{2.0}$		$\frac{46.1}{47.9}$	$0.5 \\ 0.6$	$0.1 \\ 0.1$			$0.9 \\ 1.6$	0.2	$\frac{48.4}{46.0}$	-		$0.5 \\ 0.7$	_	0.9	
1934-35	100.0 100.0		-	43.2	$0.0 \\ 0.3$	$0.1 \\ 0.1$		0.1	$\frac{1.0}{2.6}$	0.2	$\frac{40.0}{40.5}$	7.2	_	0.6	Terror .	$\frac{0.9}{2.8}$	_
1935–36	100.0 100.0			40.1	$0.3 \\ 0.2$	$\frac{0.1}{2.5}$	1.9	$0.1 \\ 0.1$	$\frac{2.0}{5.9}$		$\frac{40.5}{37.1}$	$\frac{7.2}{5.6}$	_	$0.6 \\ 0.5$	-	$\frac{2.8}{4.6}$	_
1937–38	100.0 100.0		-	$\frac{40.1}{35.9}$	$0.2 \\ 0.2$	0.2	10.2	0.1	$\begin{array}{c} 3.9 \\ 11.6 \end{array}$		$\frac{37.1}{32.1}$	$\frac{3.0}{3.2}$	0.2^{-}	$0.3 \\ 0.3$		$\frac{4.0}{4.6}$	
1937-38	100.0 100.0			33.5	$0.2 \\ 0.2$	$0.2 \\ 0.2$	12.4	$0.1 \\ 0.1$	16.5	_	28.4	$\frac{3.2}{2.3}$	$0.2 \\ 0.2$	0.6	_	$\frac{4.0}{3.4}$	
1939-40	100.0 100.0			35.2	0.2	0.4	14.4	0.1	$\begin{array}{c} 10.5 \\ 22.3 \end{array}$		34.1	$\frac{2.3}{4.2}$	$0.2 \\ 0.4$	0.0		$\frac{3.4}{2.3}$	
1940-41	100.0		_	$\frac{33.2}{21.7}$	_		_	_	$\frac{22.3}{53.3}$	_	19.3	4.2	$0.4 \\ 0.7$	1.4	_	0.1	
1941-42	100.0			$\frac{21.7}{23.7}$		_	_		. 55.5	man.	$\frac{13.3}{32.0}$		$\frac{6.7}{6.5}$	7.2	_	0.4	_
1942-43	100.0	$\frac{30.2}{26.3}$		$\frac{23.7}{20.6}$		_		_		_	$\frac{32.0}{37.2}$		$\frac{0.5}{7.2}$	8.3	_	0.4	
1943-44	100.0			$\frac{20.0}{20.8}$	7.0		_	_	_		41.6		5.1	0.0		0.1	_
1944-45	100.0			13.6		_		_	_	_	50.1	_	$\frac{3.1}{3.9}$		_	-	_
1945-46	100.0			32.4	1.9	0.4			0.6	_	56.6		$\frac{0.3}{1.7}$	1.7			_
1946-47	100.0			$\frac{32.4}{41.3}$		0.3			3.7		45.4		0.9	$\tilde{1.6}$		0.1	3.5

¹⁾ Barrel = 1 /s ton (1 ton = 1,016 kg). 2) The figures include the catch of two Norwegian expeditions hired by Germany—in 1936/37 134,200 barrels, in 1937/38 180,750 barrels, and in 1938/39 118,383 barrels.

Table h.—Average size of whales killed in the different grounds in the years 1934 to 1939, 1946, and 1947.

Species of whales and whaling grounds.	1947	1946	1939	1938	1937	1936	1935	1934
Blue-whales.	Engl. ft.	Engl. ft.	Engl. ft.	Engl. ft.	Engl. ft.	Engl. ft.	Engl. ft.	Engl. ft.
Antarctic:— South Georgia Pelagic whaling	77.09 78.29	73.41 78.25	75.81 78.11	70.89 78.42	71.79 77.49	74.27 77.75	74.15 78.57	72.67 80.51
Africa:— Coast of Natal Cape Colony	68.72 71.00	64.83	_ _	67.00	66.23	<u>-</u>	67.43	67.06
North Atlantic and Arctic: Coast of Norway Faroe Islands Coast of West Greenland New Foundland	70.45 70.00 74.75 75.40	69.41 69.60 74.67 72.91	- - - -	68.00	- - -	- - 70.70	64.00	- - -
Coast of Chile	71.09	-	-	-	-	_	-	_
Coast of Japan Bonin Island	72.90 72.00	69.25	_		_ _	<u>.</u>	_ 	-
Fin-whales.								
Antarctic:— South Georgia Pelagic whaling	67.54 67.43	66.16 67.48	65.37 67.21	64.52 67.86	63.56 67.80	$64.66 \\ 67.72$	65.76 67.61	64.44 68.99
Africa:— Coast of Natal Cape Colony	60.87 55.93	63.51	-	60.14	59.91	_ _	60.70	60.03
North Atlantic and Arctic: Coast of Norway Faroe Islands Coast of West Greenland New Foundland	60.03 59.35 58.33 61.83	60.84 60.00 60.38 60.48	60.62	62.08	62.11	60.66	59.23	59.65
Pacific (north):— California	60.59	_	_	_	_	_	_	_
Coast of Chile	56.04	-	_	-	_	_	_	_
Coast of Japan	58.33	57.29	_	_	_	_	_	-
Humpbacks.								
Antarctic:— South Georgia	38.57 48.00	41.47	39.64	41.53 41.07	39.82 40.59	40.29 41.43	44.19 40.83	38.40 40.09
Coast of Africa:— Coast of Natal Cape Colony	38.80 44.40	36.99		36.41	36.53	-	36.51	_ _
North Atlantic and Arctic, total	41.22	42,10	_	_	_	_	_	_
Pacific (north):— California	41.85	_	_	_	_	_	_	_
Coast of Chile	44.50	-	-	-	-	_	_	-
Coast of Japan Bonin Island	40.25 44.00	39.13 43.00	_	_				

Species of whales and whaling grounds.	1947	1946	1939	1938	1937	1936	1935	1934
Sei-whales.	Engl. ft.	Engl. ft.	Engl. ft.	Engl. ft.	Engl, ft.	Engl. ft.	Engl. ft.	Engl. ft.
Coast of Africa:— Coast of Natal Cape Colony	43.18 46.46	43.93	_ 	_ _ _			_ _	-
North Atlantic and Arctic, total	44.90	43.92	_	_	_	-	_	_
Pacific (north):— California	52.33	_	_	_	_	_	_	_
Coast of Chile	46.50	-	-	_	_	_	-	_
Coast of Japan Bonin Island	43.68 41.97	42.39 41.31	_	_	-	_	<u>-</u> .	_ _
Sperm-whales.								
Antarctic:— South Georgia	45.05 50.77	47.74 51.56	50.33 52.88	50.53 53.17	50.82 53.04	48.00 54.06	50.66 53.38	53.39
Coast of Africa:— Coast of Natal Cape Colony	39.20 44.04	40.20		42.12	38.47	- -	<u>-</u> -	-
North Atlantic and Arctic: Coast of Norway Faroe Islands Coast of West Greenland New Foundland	52.50 48.40 52.67 54.06	48.14 50.29 53.00 53.00	51.70	53.15	52.67	- -	_	-
Pacific (north):— California	43.60	_	_	_	_	_	-	-
Coast of Peru	43.39 40.26		_	_	_	_ _	- -	-
Coast of Japan Bonin Island	37.16 36.82	36.77 37.83		_ _	-	_ _	-	-

Table b, page 8, shows the number of whales killed in each year from 1927–28 until 1946–47, and with distribution as to the species of the whales. During these 20 years a total number of 581,900 whales have been killed. During the 80 years' period from the beginning of modern whaling in 1868 until 1946–47, the total catch amounts to 965,620 whales.

Table c, on page 9, gives the total number of whales killed in the different main areas from 1933–34 to 1946–47. Of a total catch in 1946–47 of 34,634 whales, 25,593 or 73.9 % were killed in the Antarctic. During the last pre-war seasons more than 80 % of all whales were killed in the Antarctic.

Table d, on page 9, registers the production of oil from 1933–34 to 1946–47.

Table i.-North Atlantic and Arctic.

			Sp	ecies o	f whale	es caug	ght.			F	Expedition	ns.
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
North Atlantic and Arctic. Total	1934 1935 1936 1937 1938 1939 1941 1942 1943 1944 1945 1946 1947	25 10 31 57 15 26 1 3 5 1 4 36 32	357 385 462 1,330 565 665 64 71 120 251 343 504 1,035 945	5 17 15 25 2 9 7 3 2 8 10 9 10	185 125 158 173 105 59 - 51 52 45 32 32 12	11 25 47 289 36 40 6 5 2 10 21 26 52 55	1) 6 1) 9 2) 36 1) 27 3) 3 	181 315	Barrels. 16,038 15,341 22,203 69,144 22,097 26,066 5)1,855 5)5,564 5)8,963 14,121 39,472 35,757	$egin{array}{c} 3 \\ 7 \\ 9 \\ 9 \\ 7 \end{array}$	1 	13 17 22 36 22 21 1 1 2 4 9 19 21
Faroe Islands.	1934 1935 1936 1937 1938 1939 1946 1947	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	74 75 82 142 184 153 $ 94$ 196	- 2 - 4 1 1 - 1	13 3 1 11 6 8 -	7 5 9 11 7 9 - 14 15		96 88 94 175 200 173 - 115 216	3,013 2,997 3,605 5,365 6,101 4)5,197 3,981 6,286	1 1 2 2 2 2 2 - 2 2		$egin{array}{cccccccccccccccccccccccccccccccccccc$
Iceland.	1934 1935 1936 1937 1938 1939	$\begin{bmatrix} -2\\ 5\\ 1\\ 9\\ 13 \end{bmatrix}$	$ \begin{array}{c c} - & 25 \\ 72 & 56 \\ 113 & 109 \end{array} $	- - 1 - 1	- 1 1 - 5 3	-7 -7 -21 -20 -4	-	28 85 79 147 130	691 3,415 2,862 4,920 3,764	- 1 1 1 1 1	- - - -	$-\frac{2}{2}$ $\frac{2}{3}$ $\frac{3}{3}$
Coast of Norway.	1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	1 4 9 4 4 - 1 1 1 - 3 17	132 106 147 223 261 282 - 6 58 110 112 158 392 285	- - - 1 - 1 2 - -	172 108 154 55 94 46 - 49 48 45 31 27 11	4 4 17 20 9 14 - 5 2 6 4 4 21 16	1) 6 1) 9 1) 35 1) 27 2) 3 	308 225 331 342 395 350 - 61 110 163 147 192 441 324	11,155 - 5) - 5) - 5) - 5) - 5)1,391 15,930	2 3 4 4 4 3 - - - 6) 1 3 3		6 10 12 12 12 12 9 - - - 3 9 9
Pelagic whaling in Arctic.	1934 1937	21 - 28	128 - 461	$\begin{bmatrix} 3 \\ -7 \end{bmatrix}$	100	218	 - -	152 - 814	6,720 32,375	_ _ _	$\frac{1}{2}$	4 - 11

¹⁾ Different kinds of small whales. 2) Different kinds of small whales and 1 right-whale. 3) 2 Minkowhales and 1 bottlenose. 4) As no information has been available re. oil production of one shore-station, it has been calculated on basis of the output of the other shore-station. 5) 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. 6) Catch result for the shore station and 3 catchers: 3 blue-whales, 27 fin-whales, and 1,391 barrels of whale oil.

			Spe	cies o	f whale	s caug	ht.			Е	xpedition	ıs.
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
									Barrels.			
Coast of West	1934	2	23	2	, -		-	27	_	_	_	1
Green land.	1935	_	23	6	_		-	29	_	_	-	_
	1936		15	5	-	-	-	20	-	_	-	-
	1937	4	9	4	_	_	-	17	-	_	_	1
	1938	-	7	1	-	-	-	8	_		_	1
	1939	_	3	2	-		-	5	_	-	_	1
	1046	-	4 =	_	_	_	-	60	_	-	_	1
	$1946 \\ 1947$	$rac{3}{4}$	47 51	$rac{4}{5}$	$\frac{-}{2}$	$\frac{6}{6}$	-	68		_	_	1
	1341	*	91	9		O	_	0.3	_		_	1
New Foundland.	1934		_	_	_	_			_	_	_	_
	1935	4	156	9	13	16	_	198	7,165	2	_	3
	1936	20	146	10	2	14	_	192		2	_	3
	1937	8	439	9	7	19	1) l	483				5
	1938	-	-	_	-		-	_	_	-	-	-
	1939	7	118	4	2	13	-	144	5,950		-	2
	1940	1	64	7	_	6	-	78	2,950		-	1
	1941	2	65	3	$rac{2}{4}$	_	-	72	1,855		-	1
	1942	4	62	1	4	_	-		$[^{2})1,855$		_	1
	1943 1944	$\frac{1}{5}$	$\frac{141}{231}$	$\frac{6}{10}$		4 17	-	$\frac{152}{264}$	5,564 8,963		_	$\frac{2}{4}$
	1944	11	$\frac{231}{346}$	9	$\begin{array}{c c} 1 \\ 5 \end{array}$	$\frac{17}{22}$	_	393	12,730		_	6
	1946	11	502	5	- -	11		529		$\frac{2}{2}$	_	6
	1947	14	413	6	4	18	_	455				7
	1		-1.0					1.00				

¹⁾ Right-whale. 2) Calculated.

While 73.9 % of the whales were killed in the Antarctic, the oil production in these waters amounted to 88.8 % of the total yield in 1946-47. The higher oil production in the Antarctic as compared with the number of whales killed, is due to greater yield of oil per whale in Antarctic waters. This is not due to a better method of production, but to the fact that the Antarctic whale, especially towards the end of the season is much fatter than the whale in tropical and subtropical waters. It may here be mentioned that when the baleen whale is present in tropical and temperate seas, it consumes the nourishment stored up during the stay in colder areas. Table d also gives the average production per catcher per season. In the Antarctic the average yield per catcher in 1946-47 amounted to 13,196 barrels of oil as compared to 8,803 barrels in the preceding season. This considerable increase in the production is, as previously mentioned, due to the earlier arrival of the whaling fleet at the catching grounds and more favourable weather conditions. In the North Atlantic and Arctic the average yield per catcher amounted to 1,703 barrels. This is a slightly lower average than during former seasons. On the African grounds the average production per catcher amounted to 2,649 barrels in 1946-47 as against 3,819 barrels during the preceding season. This decrease is partly due to the fact that one shore station with 5 catchers commenced operations in the middle of July and closed on October 31st, thus operating during half of the season only.

Table	jPortugal,	Azores,	and	Madeira.
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			Species	of whale	s caught		-		E	Expedition	ns.
Years	Blue.	Fin.	Hump- back	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catchers.
7004							1	Barrels.			
1934	-	-	-	-	82	1)158	240	-	_	-	-
1935	_	-	1 – 1	_	136	$^{3})140$	276	_	-	_	_
1936	_	-	-	_	172	3)308	4)480	_	_	_	_
1937	-	-	-	_	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	_	36	-	_	11	³)521	568	11,838	_	-	_
1946	_	42	-	_	753	· -	795	16,016	_	-	_
1947	-	111	-	_	624	_	735	19,537	_	-	_

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

Table e, on page 10, gives the production of sperm-oil during the years 1935/36–1946/47 specified by the different grounds. When using the term "whale-oil," this refers to the oil of the baleen whale. The whale-oil consists chiefly of the same type of fat as that of the mammals, and whale-oil is mainly used for the production of margarine. The oil extracted from the sperm-whale is of a nature entirely different from the oil of the baleen whale. The sperm-oil contains substances chemically considered as waxes, closely related to, for inst., bees' wax and wool fat. The greater part of the sperm-oil is supplied to the textile industry as sulphonates and is also used for cosmetics, medicine and soap.

As will appear from table e the total production of sperm-oil in 1946–47 and the summer 1947 amounted to 237,995 barrels. The production during the previous season amounted to 66,257 barrels. This considerable increase in the sperm-oil production in 1946–47 is mainly due to 2 floating factories engaged in sperm-whale catching off the coast of Peru with an output of 105,986 barrels. The production in the Antarctic further increased by 58,296 barrels in 1946-47 as compared to the preceding season.

Tables f and g on pages 11 and 12 give a distribution of the whaling results in all areas in respect to the various participating countries. The term country in this sense refers to the nation under whose flag operations have taken place.

On the basis of measurement-records received, the average size of the whales killed has been calculated. In table h, on pages 13 and 14, the average size of whales killed in 1946–47 and summer 1947 is compared with the corresponding figures from and including 1933–34.

Table k .- Africa.

			s_{I}	ecies c	f wha	ales ca	ught.				E	xpedition	ıs.
Grounds.	Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others	Ouncis.	Total of whales.	Oil produc- tion.	Shore sta- tions.	Floating factories.	Catch- ers.
										Barrels.			
Africa. Total.	1934	71	557	1,238	57	467			2,392	82,359		-	21
	1935	122		1,659	100	595			/	117,950	2	3	27
	1936	120	1,095	1,168	305	1,073	2)			135,081	3	3	43
	$^{3}) 1937$		1,175		121	710	4)			169,772	3	2	39
	$^{3}) 1938$	40		1,927	66	473				139,102	1	1	22
	³) 1939	27	502	200	42		$^{5})1,2$	240	2,637		2	1	?
	1940	28	324	-176	25	482			1,035	40,419	1	-	11
	1941	6	193	79	5	476	i i		759	26,638	1	-	5
	1942	2	204	156	13	123			498	19,740		-	5
	1943	10	301	80	34	299		_	724	27,373		-	5
	1944	5	227	115	24	448			819	29,380		-	5
	1945	3	162	116	34	414			729	23,189	1	-	5
	1946	12	145	93	75	659		_	984	30,552	1	_	-8
	1947	19	529	95	158	550	2)	55	1,406	47,677	2	-	18
Coast of Natal.	1934	-70	536	514	30	422	1)		1,574	60,924		_	17
v	1935	122	526	418	90	595	1)	2	1,753	67,008	2	_	17
	1936	41	528	301	68	911	l ′		1,849	64,570	2	_	18
	1937	67	755	240	64	503	!	_	1,629	67,979			16
	1938	39	536	175	64	425		_	1,239	54,352	1	_	16
	1939	27	502	200	42	615		-	1,386	51,529	2		16
	1940	28	324	176	25	482		_	1,035	40,419		_	11
	1941	6	193	79	5	476		_	759	26,638	1	_	5
	1942	2	204	156	13	123			498	19,740	1	-	5
	1943	10	301	80	34	299			724	27,373	1	_	5
	1944	5	227	115	24	448		****	819	29,380	1	_	5
	1945	3	162	116	34	414		_	729	23,189	1	-	5
	1946	12	145	93	75	659			984	30,552	1	_	8
	1947	18	485	90	119	502	ł	-	1,214	44,274	1	-	13
Cape Colony.	1936	79	566	27	214	108	2)	7	1.001	31.799	1		14
rape constant.	1937	57	398	28	49	207		43	, ,	1 - /	1		13
		_	-		_		'	_	_	-	_	_	
	1947	1	44	5	39	48	2)	55	192	3,403	1	-	5
Coast of Congo.	1934	1	21	724	27	45		_	818	21,435	1	_	4
coast of congo.	1935			1,241	10			_		50,942		3	10
	1936	_	1	840				_	918			3	11
	1937	-	_	298		- 54		_	298			1	4
South of Made	1027	4	99	1 009	0				1 957	53,500		1	6
South of Mada-	1937	4		1,223					1,257			1	6
gascar.	1938	1	2	1,752					1,805			1	9
	1939	_		_	-	61	, 11,	Z40	1,301	55,264	-	1	,

 $^{^{1})}$ Right-whales. $^{2})$ Bryde-whales. $^{3})$ Including South of Madagascar. $^{4})$ 7 right-whales and 36 Bryde wheles. $^{5})$ No specification.

Whaling in the various areas outside Antarctic.

Table i, on page 15, covers the whaling operations in the North Atlantic and Arctic. It will appear from International Whaling Statistics No. XIX that 2 shore stations resumed whaling from the Faroe Islands in 1946. The statistics recorded the number of whales killed for both stations, but particulars as to the oil production were lacking for one station. Production-report for 1946 has

Table I .- Pacific North.

			Sı	ecies o	f whal	es cau	ght.		6	E	xpedition	18.
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.	1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	140 44 54 37 5 36 41 1 - - 4	117 208 228 115 93 388 441 35 34 1	148 132 114 16 85 129 49 19 12 1 1 - 12 14	-6 -13 3 -3 7 1 2 2 -29 161	253 377 321 315 49 307 390 133 72 1 - 72 206	1) 191 1) 96 	855 857 730 483 232 922 931	39,801 38,135 7,098 3,990 148 - 4) 118	3 4 4 3 2 2 3 2 2 1	1 2 1 1 - 1 1 1 1 1 3	15 16 15 14 11 5 8 15 4 5 2 - 2 6
A laska.	1934 1935 1936 1937 1938 1939	87 41 45 33 5	94 160 170 65 91	141 118 104 12 26	- - 1 -	- 70 66 56 63 49		394 385		$egin{array}{c} 2 \\ 2 \\ 2 \\ 1 \end{array}$	- - - -	7 7 7 6 5 3
British Columbia.	1934 1935 1936 1937 1938 1939 1940 1941 1942 1943	- 6 3 1 4 - 2 1 1 1	20 48 44 50 - 90 67 25 15	$\begin{bmatrix} 1\\14\\7\\4\\-2\\27\\7\\7 \end{bmatrix}$	-	$ \begin{array}{r} -175\\ 311\\ 265\\ 252\\ -126\\ 233\\ 130\\ 69 \end{array} $		202 376 317 310 - 220	13.630	$ \begin{array}{c c} 1 \\ 2 \\ 2 \\ - \\ 1 \\ 2 \\ 1 \end{array} $		6 4 6 6 6 - 3 6 3 2
California.	1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 ——————————————————————————————————	8	$ \begin{array}{c} -\\ -\\ 14\\ -\\ 2\\ 6\\ 7\\ 10\\ 19\\ 1\\ -\\ 17 \end{array} $	- - 3 - 59 19 16 12 5 1 1	12 	_	-	189	5,144 2,602 1,002 1,837 1,607 683 948 760 148	- - 1 1 1 1 1 1	1 1 1 1	2 2 2 2 1 2 1 3 2 2
Coast of Mexico.	1035	47	3	6	6	8	_	70	3,821	_	1	3
Pelagic whaling.	1940 1941	34 40	292 367	108 6	3 7	177 156			29,494 23,822		1 1	4 7
	$ \begin{array}{r} - \\ 1946 \\ 1947 \end{array} $	- 4	-	$12 \\ 1$	29 158	72 201	_		4) 118 4) 772		$\begin{array}{c c} - \\ 1 \\ 3 \end{array}$	$\frac{2}{4}$

¹) No specification. ³) 2 right-whales and 189 without specification. ³) Right-whales. ⁴) Catch around the Bonin Island. The whale is mainly used for human food.

Table m.—Japan and

			Species o	of whale	s caught.				E	xpedition	s.
Years.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
)				1	1		Barrels.			1
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
	-	_	-	-		-		_	i –	-	-
1946	8	232	8	545	957		1,750	6) 5,719	17	-	41
1947	30	257	8	383	964	l –	1,642	6) 6,177	15	-	38

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. 6) The whale is mainly used for human food.

now been received from this station, and table i has been corrected accordingly. The same 7 land stations operating in the North Atlantic and Arctic in 1946 also carried on whaling in 1947. The total output of oil was 35,757 barrels against 39,472 in 1946. The production in 1947 is nevertheless higher than the usual yearly pre-war production. The decline in the yield in 1947 is mainly due to the decrease in the catch off the coast of Norway. Owing to the shortage of meat-supplies after the war, the production of whale-meat has increased considerably. All shore stations included in the area "North Atlantic and Arctic" are producing great quantities of whale-meat for human food. Consequently, the oil production is lower than would have been the case if the total catch had been used for that purpose.

Table j, page 17, shows the whaling off Portugal, the Azores and Madeira. The reports received from the Azores and Madeira contain no specification as to the species of whales killed. According to information obtained elsewhere, it appears that the catch in these waters consists entirely of sperm-whales. The number of whales killed has therefore been recorded under this item. The catch off the coast of Portugal consists of fin- and sperm-whales. As will be seen from the table, there is a decrease of 60 in the total number of whales killed as compared with 1946. The output of oil, however, has increased by 3,521 barrels. It is difficult to obtain exact information about the catch and the oil production from the Azores and Madeira, and it is therefore possible that the oil production in previous seasons may have been higher than estimated. It appears from the table that 770 animals were killed in 1943, apparently sperm-whales only. According to the report received 13,880 barrels of oil were extracted from these whales. The production figure recorded is probably too low.

Table k, on page 18, gives the whaling on African grounds. As will be seen from the table, whaling has been resumed in 1947 from the Cape Colony. It is an old station, previously belonging to a South-African company, which has

Ta	h	ما	n	Kam	tchat	ka.

	}		Species o	of wha	les caugl	nt.			E	editio	ns.
Years	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Floating factories.	Catch- ers.
1934	2	150	51	1	74	¹) 61	339	Barrels. 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	-		-		_	, _	_		_	_	-
1941	9	254	7	11	194	8) 68	543	18,235	_	1	3
1942	2	203	12		215	9)122	554	14,500	-	1	3
1943	-	132	29		216	¹⁰)101	478	15,941	_	1	3
	-	_	-	-	-	_	_	_	-	-	-
1946	2	117	9	_	316	²) 22	466	16,141	-	1	3

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. 9) Grey-whales. 7) 29 grey-whales and 12 without specification. 9) 2 Minke-whales, 5 grey-whales, 5 bottlenoses, and 4 dolphines. 9) 3 Minke-whales, 101 grey-whales, 7 bottlenoses, and 11 dolphines. 109 99 grey-whales, 1 bottlenose, and 1 dolphine.

now been taken over by a new whaling company. This station has not been active since 1937. That year it produced 34,515 barrels, and employed 13 catchers. The operations in 1947 commenced in the middle of July and closed on October 31st the same year, and the output of oil amounted to 3,403 barrels. Off the coast of Natal whaling was carried on in 1947 from the same shore station as in the preceding years, but 13 catchers were operating as against 8 in 1946 and 5 during the war. In 1947 44,274 barrels of oil were produced as compared to 30,552 barrels in 1946. The increased production is undoubtedly due to the increased number of catchers engaged.

From the specification as to the species it will appear that there is a marked increase in the fin-whale catch, while the sperm-whale catch on the other hand has declined considerably in spite of the larger number of catchers operating.

Table l, on page 19, is recording the operations from shore stations in the Pacific North. Since the publication of International Whaling Statistics No. XIX, particulars have been received from British Columbia for 1940, 1941, 1942 and 1943, and the table has been corrected accordingly. Whaling from British Columbia ceased in 1944, but according to information received, operations were resumed in 1948. In 1947 whaling was also resumed from the coast of California, from 1 shore station and 2 catchers.

In 1946 Japanese companies commenced pelagic whaling around the Bonin Island with one small factory ship and 2 catchers. In 1947 3 small floating factories and 4 catchers were operating. The total number of whales killed was 364 and the oil production 772 barrels. In addition to the oil the floating factories brought home to Japan 2,721 metr. tons of meat and blubber.

Along the coast of Japan are situated several shore stations, the majority of which resumed whaling in 1946. From table m, on page 20, will be seen that

Table o.-Coast of Chile and Peru.

			Species	of whale	es caught			Expeditio	xpeditions.		
Years	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
İ								Barrels.			
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		2	2	19
1937	81	130	18	3	3,888		4,120		4) 2	3	4) 25
1938	15	56	6	44	767	³) 14	902		5) _	5) 1	5) 8
1939	2	99	7	15	279	³) 5	407	5,797	1	1	4
1940	_	_	_	_		, _			_	_	_
1941	- 1	_	-	_	1,914	_	1,914	41,359		1	8
1942	_	_		_	3.346	_	3,346			1	8
1943	-	_	- 1	_	3,299	_	3,299			ī	8
1944	$_2$	61		_	304	_	367	13,863	1	_	3
1945	42	80	_	_	365	_	487	20.784	î	_	3
1946	11	224	13	1	336		585		1	_	4
1947	23	85	14	$ar{2}$	3,556	_	3,680	128,822	ī	2	20

^{1) 15} right-whales and 20 others. 2) Different kinds of small whales and 36 right-whales. 3) 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. 3) No information as to the material in operation off the coast of Chile.

15 shore stations and 38 catchers were operating in 1947. The number of whales killed in 1947 declined by 108 animals from 1946, while the oil production increased from 5,719 barrels in 1946 to 6,177 barrels in 1947. Some of the 15 shore stations were operating for a short time only, and the catchers were transferred from one station to another. The catch at the different stations varied from 2 to 584 whales. In addition to the oil, 19,848 metr. tons of meat and blubber were produced.

Table p.-Whaling off the coast of New Zealand.

			Species o	f whales	caught.				E	xpedition	ıs.
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	_	_	6 9	_	_	_	69	1,673	1	-	1) -
1937	1	-	55	-	-	-	56	1,673	1	-	3
1938	1	-	75	-	1	-	77	2,391	1		3
1939	1		80	-	_	-	81	2,689	1	_	
1940	_	-	107	_	2	-	109	3,909	1	_	_
1941		_	86	-	_	-	86	3,084	1	-	_
1942	-	-	71		-	-	71	2,988	1	-	_
1943	-		90	_	_	_	90	3,765	1	_	_
1944	-		88	-	_	_	88	2,630	1	-	-
1945	_	-	107	_	_	_	107	4,482	1	-	_
1946	- 1	-	110	_	_	-	110	4,184	1	-	_
1947	1	-	101		9	_	111	3,825	1	-	_

¹⁾ No information as to the number of catchers.

Since the publication of volume No. XIX reports have been received concerning the whaling results of the Sovjet-Russian floating factory, operating off Kamtchatka in 1946. See table n, page 21.

As will be seen from this table, the floating factory operated with 3 catchers and killed 466 whales, yielding 16,141 barrels of oil. Whaling has also been carried on in 1944, 1945 and 1947, but the statistical data relating to these years are not yet available.

Whaling from the coast of Chile and Peru in 1947 resulted in 3,680 whales killed, yielding 128,822 barrels of oil. As will appear from table o, on page 22, this is an increase in the production, as compared with 1946, of 111,265 barrels. This increase, as previously mentioned, is mainly due to the fact that 2 floating factories were engaged in sperm-whale catching off the coast of Peru in 1947 and produced 105,986 barrels of sperm-oil. The production in 1947 was the greatest ever recorded on these grounds.

Table p shows the whaling activities from New Zealand during the period 1934-1947.

It will be observed that the statistics recorded in International Whaling Statistics No. XIX (table m, on page 17) is not correct. The Marine Department of New Zealand has now sent in revised figures, included in table p, page 22. The tables recording the total catch in the different years have been corrected in accordance with the new data from New Zealand.

In 1948 whaling on grounds outside the Antarctic has been carried on approximately to the same extent as in 1947. One floating factory only has been engaged in sperm-whale catching off the coast of Peru. One company has commenced operations from Spanish Marocco, and on Iceland a new shore station has been established. The statistics concerning the summer season 1948 will be published in International Whaling Statistics No. XXIII.

Table No. I.—Whaling in 1946/47 and summer 1947.

			Species	of whales	caught.					Е	xpeditio	ns.
Geographical areas.	Blue.	Fin,	Hump- back.	Sei.	Sperm.	Othe	rs.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catchers.
									$Barrel = \frac{1}{6} ton. 1)$			
South Georgia	327	1,670	28	391	133	2)	1	2,550	145,318	3	_	18
Antarctic, pelagic whaling	9 965	12,877	1	$_2$	1,298			23,043	1,794,424		15	129
Coast of Africa:—	0,000	12,011	1		1,200		-	20,040	1,794,424	_	10	120
Coast of Natal	18	485	90	119	502			1,214	44,274	1	_	13
Cape Colony	1	44	5	39	48	³) 5	5	192	3,403	1	_	5
Atlantic and Arctic: Azores					465			465	12,974			
Madeira	_	_		_	109		_	109	$\frac{12,974}{2,585}$	_	_	_
Coast of Portugal	_	111	_	_	50			161	3,978	1	_	3
Coast of Norway.	11	2 85	-	12	16		_	324	10,871	3		9
Faroe Islands Coast of West	3	196	-	2	15		-	216	6,286	2	-	4
Greenland	4	51	5	$_2$	6		_	68	4) _			1
New Foundland .	14	413	6	$\frac{2}{4}$	18		_	455	18,600	$\frac{-}{2}$	_	7
Pacific North:—												
California		17	13	3	5		-	38	1,365	1		2
Coast of Peru, pelagic whaling		1	2		2,887			2,890	105,986		2	15
Coast of Chile	$\frac{23}{23}$	84	$1\overline{2}$	$\frac{1}{2}$	669		_	790	22,836	- 1	_	5
Coast of Japan	30	257	8	383	964		_	1,642		$1\overline{5}$	_	38
Bonin Island,												
pelagic whaling Coast of West	4	-	1	158	201			364	⁴) 772		3	4
Australia		_	2				_	2	40	1	_	1
New Zealand	1	_	101	_	9		_	111	3,825	1		_
Total	9,301	16,491	274	1,117	7,395	5	6	34,634	2,183,714	32	20	254

^{1) 1} ton = 1,016 kg. 2) Right-whale. 3) Bryde-whales. 4) The whale is mainly used for human food.

Table No. 2.—Norwegian whaling in 1946/47 and summer 1947.

			Species	of whale	s caught.				Expeditions.		
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Others.	Total of whales.	Oil production.	Shore sta- tions.	Floating factories.	Catchers.
								Barrel = $\frac{1}{6}$ ton.			
South Georgia	88	505	8	139	26	1) I	767	43,520	1	_	6
Antarctic, pelagic	4,344	6,776	-	_	646	' -	11,766		-	7	57
Coast of Norway	11	-285		12	16		324	10,871	3		9
Total	4,443	7,566	8	151	688	1	12,857	991,709	4	7	72

¹⁾ Right-whale.

Table No. 3.—British whaling in 1946/47 and summer 1947.

			Species o	of whale	s caught.				F	expeditio	ns.
Geographical areas.	Blue.	Fin.	Hump- back.	Sei.			Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.	
								$ Barrel = \frac{1}{6} ton. $			
South Georgia	110	677	10	92	37	-	926	53,968	1	_	6
Antarctic, pelagic	3,273	5,043	_	2	628	_	8,946	671,501		4	44
Coast of Natal	18	485	90	119	502	-	1,214	44,274	1	_	13
Cape Colony	1	44	5	39	48	1) 55	192	3,403	1	-	5
New Foundland	14	413	6	4	18		455	18,600	2	_	7
Coast of Peru, pelagic	-	1	2	_	2,887	-	2,890	105,986	_	2	15
New Zealand Coast of West	1	_	101	_	9		111	3,825	1	_	_
Australia	-	_	2	-	-	_	2	40	1	-	1
Total	3,417	6,663	216	256	4,129	55	14,736	901,597	7	6	91

¹⁾ Bryde-whales.

Table No. 4.—Whaling results for the various countries in 1946/47 and summer 1947.

			Species o	f whales	canaht				E	pedition	в.
Countries.	Blue.	Fin.	Hump- back.			Others.	Total of whales.	Oil production.	Shore sta- tions.	Float- ing fac- tories.	Catch- ers.
								$\begin{array}{c} \text{Barrel} = \\ \frac{1}{6} \text{ ton.} \end{array}$			
Norway	4,443	7,566	8	151	688	1)]	12,857	991,709	4	7	72
British Empire	3,417	6,663		256	4,129				7	6	91
Japan	727	735	9	541	1,169		3,181	80,244	15	5	54
Holland	401	354	_	_	15	_	770	77,310	-	1	8
Argentina	129	488	10	160	70	_	857	47,830	1	-	6
Sovjet Russia	154	226	1	-	5	_	386	35,000	-	1	8
Chile	23	84	12	2	669	_	790	22,836	1	-	5
Portugal	_	111	_	_	624	_	735	19,537	1	-	3
Denmark	7	247	5	4	21	_	284	6,286	2	-	5
United States	_	17	13	3	5	_	38	1,365	1		2
Total	9,301	16,491	274	1,117	7,395	56	34,634	2,183,714	32	20	254

¹⁾ Right-whale. 2) Bryde-whales.

Table No. 5.—Average size of whales caught in the summer season 1947.

			Average size.			
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total anim al s.		
A. Blue-whales.		Engl. feet.	Engl. feet.	Engl. feet.		
Atlantic and Arctic:— Coast of Norway Males 8 Females 3 Total 11.	No. 1 ,, 2 ,, 3	72.67 65.00 55.00	76.50 66.00	73.63 65.50		
Average		69.50	73.00	70.45		

Coographical areas			Average size.	
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.
Faroe Islands	No. 1	Engl. feet. 66.00 78.00	Engl. feet.	Engl. feet.
$\mathbf{A}\mathbf{verage}$		70.00	_	
$\left. egin{array}{ll} ext{Coast of West Greenland} \dots & \\ ext{Males} & 2 \\ ext{Females} & 2 \end{array} \right\} ext{Total 4.}$		75.00	74.50	74.75
$egin{array}{ccc} ext{New Foundland} & \dots & $	No. 1	74.57	77.33	75.40
Atlantic and Arctic, total Males $\begin{bmatrix} 20 \\ \text{Females} \end{bmatrix}$ Total 28.		71.90	75.00	72.79
$egin{array}{lll} \textit{Coast of Africa:} \\ \textit{Coast of Natal} & \dots & \\ & \textit{Males} & 5 \\ & \textit{Females} & 13 \end{array} brace \text{Total 18.}$		68.00	69.00	68.72
Cape Colony Female 1.			71.00	
Coast of Africa, total Males 5 Females 14 Total 19.	_	68.00	69.14	68.84
$egin{array}{ccc} \textit{Coast of Chile} & \dots & $		69.37	79.25	71.09
$egin{array}{ll} \textit{Pacific North:} &$	No. 1 ,, 2 ,, 3	72.00 69.50 66.50	74.82 73.40 72.63	74.38 72.29 71.40
Average		69.33	73.79	72.90
Bonin Island, pelagic Males 4.		72.00	_	
$egin{array}{ll} ext{Pacific North, total} \\ ext{Males} & 10 \\ ext{Females 24} \end{array} iggr\} ext{Total 34.}$		70.40	73.79	72.79
B. Fin-whales.				
Atlantic and Arctic:— Coast of Norway	No. 1	57.85 56.96 59.91	$\begin{array}{r} 64.06 \\ 62.59 \\ 59.58 \\ \hline 61.76 \end{array}$	60.96 59.75 59.73 60.03
Average		58.19	01.70	00.03
$ \begin{array}{c} \text{Faroe Islands} & \dots & \\ \text{Males} & 106 \\ \text{Females} & 90 \end{array} \right\} \text{ Total 196}. $	No. 1	58.44 58.08	61.10 59.87	59.58 58.99
Average		58.31	60.57	59.35

Coographical areas			Average size.	
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.
Coast of West Greenland Males $\begin{array}{c} 29 \\ \text{Females} \end{array}$ Total 51.		Engl. feet. 57.83	Engl. feet. 59.00	Engl. feet. 58.33
New Foundland	No. 1	60.20	63.53	61.83
Atlantic and Arctic, total Males 408 Females 388 Total 796.		58.86	61.91	60.35
$egin{array}{ll} Coast & of & Africa: — & & & & & & & & & & & & & & & & & & $		60.76	61.00	60.87
$egin{array}{ccc} ext{Cape Colony} & \dots & \\ ext{Males} & 26 \\ ext{Females} & 18 \end{array} iggr\} & ext{Total } 44.$		56.35	55.33	55.93
Coast of Africa, total Males 285 Females 244 Total 529 .		60.35	60.58	60.46
$\left. egin{array}{ll} \textit{Coast of Chile:} \\ \textit{Males} & 49 \\ \textit{Females } 35 \end{array} \right\} \; \text{Total } \; 84.$		55.37	56.97	56.04
Coast of Peru, pelagic:— Male 1.		58.00	—	
$egin{array}{lll} \textit{Pacific North:} & & & & & & & & & & & & & & & & & & &$		59.14	61.60	60.59
Coast of Japan	No. 1	58.59 57.44 57.34	59.00 58.85 58.57 58.78	$ \begin{array}{r} 58.79 \\ 58.41 \\ 57.92 \\ \hline 58.33 \end{array} $
Average Pacific North, total Males 135 Females 139 Total 274.	_	57.88 57.94	58.99	58.47
C. Humpbacks. Atlantic and Arctic, total	_	40.67	41.50	41.22
$egin{array}{c} Coast \ of \ Africa: — \\ Coast \ of \ Natal$	_	38.53	39.15	38.80

Chagnahiral			Average size.	
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.
Cape Colony Females 5.		Engl. feet.	Engl. feet. 44.40	Engl. fet.
$\left. \begin{array}{ll} \text{Coast of Africa, total} \dots \dots \\ \text{Males} & 51 \\ \text{Females} & 44 \end{array} \right\} \text{ Total } 95.$	_	38.53	39.75	39.09
$egin{array}{c} \textit{Coast of Chile} & \dots & $		46.00	42.40	44.50
Coast of Peru, pelagic	*	37.50		
$\begin{array}{c} \textit{Pacific North:} \\ \text{California} & \dots & \dots \\ \text{Males} & 5 \\ \text{Females} & 8 \end{array} \right\} \text{ Total } 13.$		42.00	41.75	41.85
$ \begin{array}{c} \text{Coast of Japan} \\ \text{Males} 5 \\ \text{Females} 3 \end{array} \right\} \text{ Total } 8. $	No. 1	45.00 39.25	36.00 42.00	$\frac{40.50}{40.17}$
Average		40.40	40.00	40.25
Bonin Island, pelagic Female 1.			44.00	
$ \begin{array}{c} \text{Pacific North, total} \\ \text{Males} & 10 \\ \text{Females} & 12 \end{array} \right\} \text{ Total } 22. $		41.20	41.50	41.36
$egin{array}{ccc} Coast & of & West & Australia & \dots & $		36.00	39.00	37.50
D. Sei-whales.				
$egin{array}{ccc} Atlantic \ and \ Arctic, \ { m total} \ \dots \ & { m Males} & 12 \ { m Females} & 8 \ \end{array} egin{array}{ccc} { m Total} \ 20. \end{array}$		44.92	44.88	44.90
$egin{array}{c} Coast \ of \ Africa: \ Coast \ of \ Natal \dots & Males \ 65 \ Females \ 54 \ \end{array} ight\} \ Total \ 119.$		42.82	43.61	43.18
$egin{array}{ll} ext{Cape Colony} & \dots & $		45.64	46.92	46.46
$ \begin{array}{c} \text{Coast of Africa, total} \dots \\ \text{Males} 79 \\ \text{Females} 79 \end{array} \right\} \text{ Total } 158. $		43.32	44.66	43.99
Coast of Chile	_		46.50	

George bird and		Average size.					
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.			
Pacific North:— California		Engl. feet.	Engl. feet. 52.33	Engl. feet.			
$ \begin{array}{c} \text{Coast of Japan} \dots \\ \text{Males} & 157 \\ \text{Females} & 226 \end{array} \right\} \text{ Total } 383. $	No. 1 ,, 2 ,, 3	43.54 42.87 42.04	45.24 44.11 42.07	44.55 43.54 42.06			
$egin{aligned} ext{Average} \end{aligned}$		43,01	44.15	43.68			
$\begin{array}{cc} \text{Bonin Island, pelagic} & \dots & \dots \\ \text{Males} & 82 \\ \text{Females} & 68 \end{array} \right\} \text{ Total } 150.$		41.74	42.24	41.97			
Pacific North, total Males 239 Females 297 Total 536.		42.58	43.79	43.25			
E. Sperm-whales.							
$egin{array}{lll} Atlantic & and & Arctic: & & & & & & \\ & Coast & of & Norway & & & & & & \\ & & & & Males & 15 & & & & \\ & & & & Females & 1 & & & & \\ & & & & & & & & \\ \hline \end{array}$	No. 1 ,, 2 ,, 3	53.50 52.67 51.00	 55.00	 51.80			
${\bf Average}$		52.33	55.00	52.50			
Faroe Islands	No. 1	52.00 47.85					
Average		48.40					
Coast of West Greenland Males 6.	_	52.67					
New Foundland	No. 1	54.06					
$egin{array}{ll} ext{Atlantic} & ext{and} & ext{Arctic, total} & \dots & \\ ext{Males} & 52 \\ ext{Females} & 1 \end{array} iggr\} & ext{Total } 53.$	_	51.77	55.00	51.83			
$egin{array}{lll} Coast & of & Africa: & & & & & & & & & \\ Coast & of & Natal &$		43.63	32.82	39.20			
$egin{array}{ll} ext{Cape Colony} & \dots & $		44.37	36.50	44.04			
$ \begin{array}{cc} \text{Coast of Africa, total} & \dots & \dots \\ \text{Males} & 342 \\ \text{Females} & 208 \end{array} \right\} \text{ Total } 550. $		43.73	32.86	39.62			
$egin{array}{ccc} Coast \ of \ Chile \ \dots & Males & 404 \ Females & 265 \ \end{array} iggr gather Total \ 669.$		43.06	35.98	40.26			

George bird			Average size.	
Geographical areas. Number of whales measured.	Company.	Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
Coast of Peru, pelagic	No. 1 ,, 2	44.55 43.39	$\frac{34.94}{34.37}$	$rac{43.50}{42.74}$
Average		44.37	34.88	43.39
Pacific North:— California Males 5.		43.60		—
Coast of Japan	No. 1	41.37	33.87	37.38
$\left. egin{array}{ll} ext{Males} & ilde{450} \ ext{Females} & ilde{514} \end{array} ight\} ext{Total } 964.$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$41.35 \\ 41.05$	$33.45 \\ 33.21$	$37.20 \\ 36.64$
Average		41.31	33.58	37.16
$\begin{array}{cc} \text{Bonin Island, pelagic} & \dots & \dots \\ \text{Males} & 58 \\ \text{Females} & 137 \end{array} \right\} \text{ Total } 195.$		39.14	35.83	36.82
Pacific North, total Males 513 Females 651 Total 1,164.		41.09	34.01	37.13
F. Bryde-whales.				
$ \begin{array}{c} \textit{Coast of Africa:} \\ \textit{Cape Colony} \dots \\ \textit{Males} & 20 \\ \textit{Females} & 35 \end{array} \right\} \; \textit{Total 55}. $		43.10	44.91	44,25

Table No. 6.—Whales caught in the summer season 1947, by species, sex, and size.

I. Coast of Norway.

Blue-whales.

T. 1.4.4	Num	ber of	Total		Num	Total		
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
55	1		1	78	_	-	_	
$\frac{65}{66}$	1	- 1	1	79 80	_	1	1	
67	1	_	i	81	ī	_	1	
68	1	_	ī	Sum	8	3	11	
69	_	_		Sum	0	3	11	
70	1	_	1	The state of the s	(75	,	60 ×0 € 1	
71	-	-	_			ales:	69.50 feet	
72		_	-	Average		males:	73.00 ,,	
73	-	-	_		(T c	tal animal	s: 70.45 ,,	
74		1	1					
75	2	_	2	D	, (Ma	ales: 72.7	73	
76	_	_	_	Per	cent $\left\{\begin{array}{l}\mathbf{m}\\\mathbf{F}\epsilon\end{array}\right.$	ales: 72.7 males: 27.2	27	
77	_	_	_		(

Fin-whales.

	Number of		Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
46	_	1	1	65	5	9	14
47	-	_		66	3	14	17
48	-	_	-	67	_	10	10
49				68	1	7	8
50	7	6	13	69	1	8	9
51	12	2	14	70	_	8 5	5
52	5	$\begin{bmatrix} 2 \\ 3 \\ 3 \end{bmatrix}$	8	71 ·	-	2	$egin{array}{c} 9 \\ 5 \\ 2 \\ 2 \\ 1 \\ \end{array}$
53	4	3	7	72	_	$\frac{2}{2}$	2
54	6	10	16	73	_	1	1
55	6	10	16	74		_	_
56	8	6	14	75		1	1
57	6	1	7	G	120	147	907
58	11	5	16	Sum	138	147	285
59	7	4	11		(Mal	es.	58.19 feet
60	18	3	21	Average		nales:	61.76
61	14	7	21	Archago	Tot	al animals	. 60 02 "
62	8	5	13	1	•		
63	13	9	22	Per o	_{ent} ∫ <u>M</u> al	es: 48.4 2 nales: 51.5 8	2
64	3	13	16	1010	Fer	nales: 51.58	3

Sei-whales.

	Num	ber of	Total	
Engl. feet.	males.	females.	animals.	
39	_	1	1	
40	-	-	-	Males: 44.86 feet
$\begin{array}{c} 41 \\ 42 \end{array}$	_	1	_ 1	Average size { Females: 44.20 ,,
43	2	_	$\frac{1}{2}$	Total animals: 44.58 "
44	-	_	-	$Per cent \begin{cases} Males: 58.33 \\ Females: 41.67 \end{cases}$
45	3	1	4	Females: 41.67
46	1	1	2	`
47	1	_	1	
48			-	
49		1	1	
Sum	7	5	12	

Sperm-whales.

	Num	Number of			Number of		Total		
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	es. females. an		animals.	
48 49	2	-	2 -	58 59	_ 1	_	_ 1		
50 51	3	-	3 -	Sum	15	1	16		
52 53 54 55	$\begin{matrix} 3\\2\\2\\2\end{matrix}$	- - 1	$\begin{matrix} 3\\2\\2\\3\end{matrix}$	Average	e size {]	Males: Females: Fotal animal Males: 93.7		feet	
56 57	_		-	Per		Females: 6.2			

2. Faroe Islands.

Blue-whales.

Engl. feet.	Number of males.
66 78	2
Sum	3

Average size:— Males: 70.00 feet

Fin-whales,

	Number of		Total		Number of		Total	
Engl. feet.	males.	females.	animals	Engl. feet.	males.	females.	animals.	
44 45 46 47 48 49 50 51 52 53 54 55 56 57	1 - - 5 1 3 2 1 3 6 4 5 5	1 - 1 - 5 2 4 - 2 2 4 3 6	2 - 1 - 5 1 8 4 5 3 8 6 9 8	63 64 65 66 67 68 69 70 71 72 Sum		5 4 6 6 4 4 - 2 3 1 90	9 10 8 8 8 5 4 - 2 3 1 196 58.31 feet 60.57 ,	
58 59 60 61 62	$egin{smallmatrix} 8 \\ 7 \\ 18 \\ 10 \\ 12 \\ \end{bmatrix}$	$egin{array}{c} 6 \\ 3 \\ 7 \\ 9 \\ 6 \\ \end{array}$	$\begin{array}{ c c c }\hline 14 \\ 10 \\ 25 \\ 19 \\ 18 \\ \hline \end{array}$	$egin{array}{lll} ext{Average size} & ext{Females:} \ ext{Total animals} \ ext{Per cent} & ext{Males:} & 54.0 \ ext{Females:} & 45.9 \ ext{Fe$		ls: 59.35		

Sei-whales.

	Num	Total		
Engl. feet.	males.	females.	animals.	
40 44	1	_	1	
		1	<u> </u>	
Sum	1	1	$_{1}$	

Average size: Total animals: 42.00 feet.

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
38	1	48	1
39	1	49	-
40	_	50	3
41	_	51	1
42	-	52	1
43	-	53	-
44	_	54	2
45	1	55	1
$\begin{array}{c} 46 \\ 47 \end{array}$	$egin{pmatrix} 1 \\ 2 \end{bmatrix}$	Sum	15

Average size:— Males: 48.40 feet.

3. Coast of West Greenland.

Blue-whales.

	Nun	nber of	Total				
Engl. feet.	males.	females.	animals.				
73 74	- - 0	1 -	1 -	Average size	Males: Females: Total animals:	75.00 74.50 74.75	feet
$\frac{\frac{75}{76}}{\frac{\text{Sum}}{}}$	$\frac{2}{2}$	$\left -\frac{1}{2} \right $	$\frac{2}{1}$		Males: 50.00 Females: 50.00		"

Fin-whales.

_	Number of		Total		Number of		Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	males. females.		animals.	
47	1	_	1	60	3	2	5	
48 49	_	_	_ _	$\begin{array}{c c} 61 \\ 62 \end{array}$	$rac{2}{1}$	$\frac{3}{3}$	$egin{array}{c} 5 \ 4 \end{array}$	
50		1	1	63	1	3	4	
$\frac{51}{52}$	_	1	ī	64	1		1	
53	_	_	_	Sum	29	22	51	
54	1	1	2		(Ma	les:	57.83 feet	
55 56	4 4	1	$rac{5}{4}$	Average	size { Fer	males:	59.00 "	
57	$\overset{\mathtt{r}}{2}$	_	$\overset{\bullet}{2}$		•	tal animals	"	
58 59	$rac{4}{5}$	4 3	8 8	Per		les: 56.8 nales: 43.1		

Humpbacks.

77 1 4 1	Num	ber of	Total			
Engl. feet.	males.	females.	animals.			
42 43 44	1 - 1	_ 1 1	1 1 2		Males: Females: Total animals:	
Sum	$\frac{}{2}$	$-\frac{1}{3}$	5	Per cent	$\left\{ \begin{array}{ll} \text{Males:} & 40.00 \\ \text{Females:} & 60.00 \end{array} \right.$	

Sei-whales.

Engl. feet	Number of males.
48 49 Sum	$\begin{array}{ c c }\hline 1\\1\\\hline 2\\\hline \end{array}$

Average size: Males: 48.50 feet.

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
50 51 52 53	1 2 - -	54 55 Sum	$\begin{array}{ c c }\hline 1\\2\\\hline \hline 6\end{array}$

Average size:— Males: 52.67 feet.

4. New Foundland.1)

Blue-whales.

Engl. feet.	Number of		Total	
	males.	females.	animals.	
66	1	_	1	
72	1	_	1	
73	1	_	1	Males: 74.57 feet
74	${f 2}$	_	2	Average size { Females: 77.33 »
75	_	1	1	Average size $\begin{cases} Females: 77.33 \\ Total animals: 75.40 \end{cases}$
76	_	_	-	•
77	1	_	1	$egin{array}{ll} ext{Per cent} & ext{Males:} & 70.00 \ ext{Females:} & 30.00 \end{array}$
78	_	1	1	
79	_	1	1	(remaies. 50.00
86	1	_	1	
Sum	7	3	10	

¹⁾ Specification for 1 shore station.

	Number of		Total		Number of		Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
48	1	_	1	65	15	20	35
49	_			66	1	11	12
50	2	_	2	67		17	17
51	_	_	_	68		9	9
52	1		1	69		4	4 5
53	_		-	70	_	5	5
54	-		-	71	_	1	1
55	11	11	22	72		1	1
56	8	4	12	Sum	135	129	264
57	5	4	9	Sum	199	129	204
58	5	3	8		CM	ales:	60.20 feet
59	12	$\frac{2}{7}$	14	A		aies: emales:	63.53
60	24	7	31	Average		emaies: otal anima	
61	18	5	23		(10	otai amma	is: 01.55 ,,
62	14	7	21	0.00	(M	ales: 51.	1.4
63	8	11	19	Per	cent { M	ales: 51. emales: 48.	.1 4 .06
64	10	7	17		(F	emaies: 48 .	.80

Humpbacks.

	Number of		Total			
Engl. feet.	males.	females.	animals.			
35 36 43	1	2 -	2 1		{ Females: Total animals:	
Sum	1	3	4	Per cent	$\left\{\begin{array}{ll} \text{Males:} & 25.00 \\ \text{Females:} & 75.00 \end{array}\right.$	

Sei-whales.

	Number of		Total	
Engl. feet.	males.	females.	animals.	
$\begin{array}{c} 42 \\ 43 \\ 44 \end{array}$	1 -	_ 1	1 1	$\textbf{Average size} \left\{ \begin{array}{ll} \textbf{Males:} & \textbf{44.00 feet} \\ \textbf{Females:} & \textbf{47.00} & ,, \\ \textbf{Total animals:} & \textbf{45.50} & ,, \end{array} \right.$
45 46	_ _ 1	-	_ _ 1	•
Sum	$\frac{-}{2}$	$\left \begin{array}{c} 1 \\ 2 \end{array} \right $	4	Per cent $\left\{ \begin{array}{ll} \text{Males:} & 50.00 \\ \text{Females:} & 50.00 \end{array} \right.$

Engl. feet.	Number of males	Engl. feet	Number of males
49 50	3 -	56 57	$\frac{1}{2}$
$\begin{array}{c} 51 \\ 52 \end{array}$	- 1	58 59	1
53	$\frac{1}{2}$	60	1
$\begin{array}{c} 54 \\ 55 \end{array}$	$egin{array}{c} 3 \ 2 \end{array}$	Sum	16

Average size:— Males: 54.06 feet.

5. Summary Atlantic and Arctic. Blue-whales.

	Number of		Total		Number of		Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
55	1	_	1	78	1	1	$\frac{2}{2}$	
65	1	-	1	79	_	2	2	
66	3	1	4	80	_	_	-	
67	1	_	1	81	1	-	1	
68	1	-	1	86	1	_	1	
69		_	_	Sum	20	8	28	
70	1	_	1	- Suin				
71		_			(M	ales:	71.90 feet	
72	1	-	1	Arrono			75.00	
73	ĩ	1	$\tilde{2}$	Average	e size j m	emales: otal anima	19.00 ,,	
74	$\hat{2}$	î	$\frac{2}{3}$		(I	otai amma	is: 12.19 ,,	
$7\overline{5}$	$ ilde{4}$	i	5		(M	-1 71	49	
76		î	i	Per	$\operatorname{cent} \left\{ \begin{array}{l} \mathbf{M} \\ \mathbf{T} \end{array} \right\}$	ales: 71. emales: 28.	.40 .57	
77	1	_	i		(r	emaies: 28.	91	

Fin-whales.

	Numl	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
44	1	1	$_2$	64	20	24	44
45	_	_	_	65	22	35	57
46	-	2	2	66	6	31	37
47	1	_	1	67	1	31	32
48	6	_	6	68	1	20	21
49	1	_	1	69	1	12	13
50	12	12	24	70		12	12
51	14	4	18	71		6	6
52	7	8	15	72	_	4	4
53	7	3	10	73	-	1	1
54	13	13	26	74	_	_	_
55	25	24	49	75	-	1	1
56	25	14	39	Sum	408	388	796
57	18	8	26			1 333	<u></u>
58	28	18	46		ſ M	lales:	58.86 feet
59	31	12	43	Average	e size $\{$ F	'emales:	61.91 "
60	63	19	82			otal anima	
61	44	24	68		(71/	Iales: 51	.26
62	35	21	56	Per		'emales: 48	
63	26	28	54	troublement of the control of the co	(r	emaies: 48	./±

Humpbacks.

Engl. feet.	Number of		Total	
Engl. feet.	males.	females.	animals.	
35 36 42 43 44 49 Sum	- 1 1 - 3	2 - - 2 1 1 - 6	2 1 1 2 2 2 1	$\begin{array}{c} \text{Average size} \left\{ \begin{array}{ll} \text{Males:} & 40.67 \text{ feet} \\ \text{Females:} & 41.50 \\ \text{Total animals:} & 41.22 \\ \end{array} \right., \\ \text{Per cent} \left\{ \begin{array}{ll} \text{Males:} & 33.33 \\ \text{Females:} & 66.67 \end{array} \right. \end{array}$

Sei-whales.

	Number of		Total		Number of		Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
39	_	1	1	50	_	_	-
40	1	-	1	51	_	1	1
41	-	-	-	Sum	12	8	20
42	1	1	2	10 0022		1	
43	2	1	3		(N	Iales:	44.92 feet
44	_	1	1	Average	size { F	'emales:	44.88 ,,
45	3	Ţ	4	11,010,0	T	'emales: 'otal animal	ls: 44 .90 ,,
46	2	1	3	i.	-		
47	1	_	Ţ	Per	cent { N	Iales: 60. 'emales: 40.	00
48	1	-	1	1	1 J	emales: 40.	00
49	1	1	2	1			

Sperm-whales.

Engl. feet.	Number of		Total		Number of		Total
	males.	females.	animals.	Engl. feet.	males.	females.	animals.
38	1		1	56	1	_	1
3 9	1	i – i	1	57	${f 2}$	_	2
45	1	_	1	58	1		1
46	1	_	1	59	1		1
47	2	_	2	60	1	_	1
48	3	_	3	Sum	$\phantom{00000000000000000000000000000000000$	1	53
49	3		3	Bulli		1 1	00
50	7	_	7		ſ M	ales:	51.77 feet
51	3		3	Averag	e size { F	emales:	55.00 ,,
52	5	_	5			otal anima	ls: 51.83 "
53	4	_	4		•		**
54	8	-	8	Per	$cent \left\{ \begin{array}{l} M \\ E \end{array} \right.$	ales: 98. emales: 1.	
55	7	1	8	A SA	(I	emales: 1.	89

6. Coast of Natal.

Blue-whales.

Engl. feet.	Number of		Total		Number of		Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
60	_	1	1	79	1	1	2	
65	3	2	5	80	_	_	_	
66	1	2	3	81	_	1	1	
67	_	1	1	Sum	5	13	18	
68	_	2	2	15 4112			1	
69		1	1			[ales:	68.00 fee	
70	_	-	_	Averag	e size $\{ F$	emales:	69.00 ,,	
71	~	1	1		T	otal anima	ls: 68.72 ,,	
72	-	1	1		•		,,	
73	-	_		Per	$\operatorname{cent} \left\{ \begin{array}{l} M \\ T \end{array} \right.$	(ales:27.emales:72.	.10	
74	_	_	_		(F	emales: 72.	,22	

Fin-whales.

46	1	_	1	68	10	7	17
47	_	_	_	69	5	i	6
48	1		1	70	5	7	$1\overset{\circ}{2}$
49	_	1	1	71	4	5	9
50	7	10	17	72	2		
50 51	11	7			$\frac{2}{3}$	$egin{array}{c} 4 \ 2 \ 5 \end{array}$	6 5 5
	11	,	18	73	3	2] 5
52	4	10	14	74	_	Э	9
53	8	9	17	75	_	_	_
54	14	5	19	76	_	2	2
55	11	13	24	77	_	-	_
56	9	11	20	78	_	1	1
57	13	9	22	79	_	2	2
58	14	11	25	80	_	_	_
59	10	8	18	81	_	1	1
60	14	11	25	Sum	259	226	485
61	16	13	29				1
62	15	21	36			ales:	60.76 feet
63	19	10	29	Averag	e size { F	\mathbf{emales} :	61.00 ,,
64	13	11	24		´ T	otal anima	ls: 60.87 ,,
65	21	12	33		•		
66	14	13	27	Per	$cent \left\{ \begin{array}{l} M \\ T \end{array} \right\}$	ales: 53.	.4U .eo
67	15	4	19		(E	emales: 46.	.00

Humpbacks.

30 31 32 33 34 35 36 37 38 39 40	1 3 1 2 7 5 5 3 1 8	1 - - 3 4 3 3 6 1	2 - 3 1 5 11 8 8 9 2 14	44 45 46 47 48 49 Sum	$\mathbf{ge} \text{ size } \left\{ egin{array}{l} \mathbf{F}_0 \\ \mathbf{T}_0 \end{array} \right.$	1 2 - 1 2 - 39 ales: emales: otal anima	,,
	8 1 4 4	6 1 4 1			T) M) annt		ls: 38.80 ,, .67

Sei-whales.

Engl. feet.	Number of		Total		Nun	Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.
40	18	16	34	51	_	2	2
41	3	7	10	52		_	_
42	13	5	18	53	1	2	3
43	6	1	7	Sum	65	$\overline{54}$	119
44	11	4	15	Sum		1 02	
45	4	7	11		(N	fales:	42.82 feet
46	5	4	9	Average	e size { F	emales:	43.61 ,,
47	3	1	4		r	otal animal	s: 43 .18 ,,
48	1	2	3	li .	•		"
49		1	1	Per	cent { N	Iales: 54.6 'emales: 45.5	02
50		2	$\tilde{2}$	1	1 J	emales: 45.	38

Sperm-whales.

		1					
30	11	38	49	48	13	_	13
31	1	35	36	49	7		7
32	4	27	31	50	29	_	29
33	2	26	28	51	23	_	23
34	7	23	30	52	13	_	13
35	16	39	55	53	7	_	7
36	12	7	19	54	10	_	10
37	20	5	25	55	3	_	3
38	10		14	56	1	_	1
39	6	$\frac{4}{2}$	8	Sum	296	206	502
40	18	_	18	Sum	290	1 200 (302
41	13	_	13				
$\frac{1}{42}$	9		9			Iales:	43.63 feet
$\overline{43}$	13	_	13	Averag	ge size { 上	emales:	32.82 ,,
44	9		9		rj	otal animal	ls: 39.20 "
45	13	_	$1\overset{\circ}{3}$		(1)	fales 58	96
46	15		15	Per	$\frac{1}{4}$ cent $\frac{1}{4}$	Tales: 58.9 'emales: 41.9	04
47	11	_	11	Market stands	(π	omaios. 11.	· .

7. Cape Colony.

Engl. feet.	Female.
71	1

Engl. feet.	Number of		Total		Number of		Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
44 52 53	- 5 1	$\begin{array}{c}1\\3\\4\end{array}$	1 8 5	66 67 68	-	- - 1	- - 1	
54 55 56 57	$ar{5}$ $ar{1}$ $ar{5}$ $ar{3}$	$egin{array}{c} 2 \\ 1 \\ 2 \\ 1 \end{array}$	$egin{array}{c} 7 \ 2 \ 7 \ 4 \end{array}$	69 70 71 Sum	$\frac{}{}$	- - - 18	- - 1 	
58 59 60 61 62 63	- 1 2 - - 2	- 1 - 2 -	$\begin{bmatrix} -1\\ 3\\ -2\\ 2\end{bmatrix}$	Averag	56.35 feet 55.33 ,, ls: 55.93 ,,			
$\begin{bmatrix} 64 \\ 65 \end{bmatrix}$	-			Per	$\operatorname{cent} \left\{ egin{array}{l} \mathbf{M} \\ \mathbf{F} \epsilon \end{array} \right.$	ales: 59. emales: 40.	91	

Humpbacks.

Engl. feet.	Number of females.
36 43 48 52	1 2 1 1
Sum	5

Average size: Females: 44.40 feet.

Sei-whales.

Engl. feet.	Number of		Total		Num	Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.
40 41 42 43	I - - 3	- - 1 3	1 - 1 6	50 51 Sum	$\frac{\frac{-}{2}}{14}$	$\begin{array}{ c c }\hline 3\\3\\\hline 25\\\hline \end{array}$	3 5 39
44 45 46 47	$\frac{1}{2}$	2 3 3 2	2 5 7 4	Average	$ ext{size} \left\{egin{array}{l} ext{Male} \ ext{Fem} \ ext{Tota} \end{array} ight.$		45.64 feet 46.92 ,, 46.46 ,,
48 49		1 4	$\frac{1}{4}$	Per c	$\operatorname{ent} \left\{ egin{array}{l} \operatorname{Male} \ \operatorname{Fem} \end{array} ight.$	es: 35.90 nales: 64.10)

	Number of		Total		Nur	Total		
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
36	1	1	2	48	2	-	2	
37	2	1	3	49	2	-	2	
38	1	-	1	50		-	-	
39	1	_	1	51	5	-	5	
40		_	_	Sum	46	2	48	
41	7	_	7	Juli				
42	5	_	5	1	ſI	Males:	44.37 feet	
43	4	_	4	Average	e size {]	Females:	36.50 ,,	
44	2	_	2		1.7	Total animals	s: 44.04 ",	
45	1	_	1	İ	•		"	
46	8	_	8	Per	$\operatorname{cent} \left\{ \begin{array}{l} \frac{1}{2} \end{array} \right\}$	Males: 95.8	33	
47	$\ddot{5}$	-	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$,,,,,,	Females: 4.1	17	

Bryde-whales.

32	1	_	1	46	1		1	2
33	- \	1	1	47	1		6	7
3 4	-	-	-	48			4	4
35	2	1	3	49	1		3	4
36	-	-		50	-		1	1
37	- 1	1	1	51	1		1	2
38	-	-	_	Sum	20		35	55
39	-	-	-					
40	-	-				(Male	s:	43.10 fee
41	1	-	1	Averag	ge size {	Fem		44.91 ,,
42	2	2	4		,	Tota	l animal	ls: 44.25 "
43	2	6	8			•		
44	4	3	7	Per	r cent	Male	s: 36.5 ales: 63.5	30 C4
45	4	5	9			[Fem	ales: 63.	04

8. Summary Coast of Natal and Cape Colony.

60		1	1	79	1	1	9
65	3	$\overset{1}{2}$	5	80		_	_
66	1	$ar{2}$	3	81	_	1	1
67	_	1	1	Sum	5	14	19
68	-	2	2_{\cdot}			1	
69	-	1	1		ſ	Males:	68.00 feet
70	_	_	_	Averag	ge size {	$\mathbf{Females}:$	69.14 "
71	-	2	2		´	Total anima	ls: 6 8.84 ,
72	_	1	1		•		,,
73	_	_	_	Per	r cent {	Males: 26. Females: 73.	.32 .00
74	_	_	_		, (remaies: 73.	.08

Fin-whales.

	Num	her of	Total		Num	ber of	Total			
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.			
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65	- - 1 - 7 11 9 9 19 12 14 16 14 11 16 16 15 21	1 1 10 7 13 13 13 10 11 8 12 13 23 10 11 12	1 - 1 1 1 17 18 22 22 26 26 27 26 25 19 28 29 38 31 24 33	67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 Sum	$egin{array}{c} \mathbf{e} & \mathbf{size} \left\{ egin{array}{c} \mathbf{F}_0 \\ \mathbf{T}_0 \end{array} ight. \end{array}$	4 8 1 7 7 5 4 2 5 5 - 1 2 - 1 2 4 4 ales: emales: otal anima. (ales: 53.)	.88			
66										
			Hump	backs.		1				
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	1 -3 1 2 7 5 5 3 1 8 1 4 4 2 2	$egin{array}{cccccccccccccccccccccccccccccccccccc$	2 - 3 1 5 11 9 8 9 2 14 2 8 7 3 4	46 47 48 49 50 51 52 Sum	e size $\left\{ egin{array}{l} \mathbf{F} \\ \mathbf{T} \end{array} \right.$	ales: emales: 53. emales: 46.	68			
			Sei-w	hales.						
40 41 42 43 44 45 46 47 48 49	19 3 13 9 11 6 9 5	16 7 6 4 6 10 7 3	35 10 19 13 17 16 16 8 4	51 52 53 Sum Averag	$_{ ext{ge size}} \left\{ egin{array}{l} ext{F} \ ext{T} \end{array} ight.$	5 2 79 Tales: emales: otal anima fales: 50. emales: 50.				
50		5 5	5 5	Per	F	emales: 50.	.00			

Total Cont	Number of		Total		Num	Number of	
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
30 31 32 33 34 35 36 37	11 1 4 2 7 16 13 22	38 35 27 26 23 39 8 6	49 36 31 28 30 55 21 28	48 49 50 51 52 53 54 55	15 9 29 28 13 7 10	- - - - - -	15 9 29 28 13 7 10
38 39	11 7	$\frac{4}{2}$	$\frac{15}{9}$	$\frac{56}{\text{Sum}}$	$\frac{1}{342}$	208	$-\frac{1}{550}$
40 41 42 43 44 45 46 47	18 20 14 17 11 14 23 16	 	18 20 14 17 11 14 23 16	Average Per	$e \text{ size } \begin{cases} F_0 \\ T_0 \end{cases}$	ales: emales: otal animal ales: 62. emales: 37.	18

Bryde-whales.

	1		1		1	1	
32	1	_	1	46	1	1	2
33	_	1	1	47	1	6	7
34	_	-	_	48	_	4	f 4
35	2	1	3	49	1	3	4
36	-	-	-	50	_	1	1
37	_	1	1	51	1	1	2
38	_	_	-	Sum	20	35	55
39		-	-	- Sum	, 20	1 00 1	
40	-	_	- '			Iales:	43.10 feet
41	1	-	1	Averag	$ge size \ $ F	'emales:	44.91 ,,
42	2	2	4		Γ	'otal animal	s: 44.25 "
43	2	6	8		(1	Iales: 36.	
44	4	3	7	Per		Iales: 36.5 'emales: 63.6	
45	4	5	9		(r	emaies: 05.	94

9. Coast of Chile.

66 67	6 3	_	6	78 79	_	_	-
68	$\frac{3}{2}$	_	2	80	_	i	ĺ
$\frac{69}{70}$	2	-	$\frac{2}{2}$	$\begin{array}{c} 81 \\ 82 \end{array}$	1	-	1
71	_	-	_	Sum	19	$-\frac{1}{4}$	$\frac{1}{23}$
72	-	-	_	- Sum		Males:	69.37 fee
$\begin{array}{c} 73 \\ 74 \end{array}$	1 -	_	1 -	Averag	e size {	Females:	79.25 ,,
75	_	-	-		ţ	Total animal	"
$\frac{76}{77}$	1 1	1	$egin{array}{c} 2 \ 1 \end{array}$	Per	$\cdot \text{ cent } \left\{ \right.$	Males: 82.5 Females: 17.	

	Num	ber of	Total		Num	ber of	Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
39 40 41 42 43 44 45 46 47	2 - 2 - - - - 1	- - - 1 -	2 - 2 - 1 - 1	61 62 63 64 65 66 67 68 69	1 3 1 2 - 2 - 1	1 1 1 1 1 1 -	2 4 2 2 1 3 -
$\frac{48}{49}$	$\frac{-}{4}$	_	4	70 71	_	_	-
50	-	_	_	72	-	-	-
51	$\frac{3}{2}$	_	3	73	1	1	2
52 52	2	_	$egin{array}{c} 3 \ 2 \ 2 \end{array}$	Sum	49	35	84
53 54 55 56 57 58 59 60	10 3 2 2 2 3 3	2 9 3 5 3 4 - 2	2 19 6 7 5 7 3 3	Averag Per	$e \text{ size } \begin{cases} F_0 \\ T_0 \end{cases}$	ales: emales: otal animal ales: 58. emales: 41.	33

Humpbacks.

38 39 40	- 1 -	1 - 1	1 1 1	52 53 54	1	_ _ _	- 1 -
41	2	1	3	55	_	_	_
42	1	_	1	56	1	_	1
43	-	_	_	Sum	7	5	12
44	-	-	_			1	
45	_	1	1		(M	ales:	46.00 feet
46	_	-	_	A			42.40
47	_	_	i -	Averag	$ge size \left\{ egin{array}{l} \mathbf{F}_{i} \\ \mathbf{F}_{i} \end{array} \right.$	emales: otal anima	
48	_	1	1		(I	otai amma	is: 44.50 "
49	_	-	_	_	. f M	ales: 58.	33
50	1	_	1	Pei	$r \text{ cent } \left\{ \begin{array}{l} m \\ F \end{array} \right\}$	lales: 58. emales: 41.	67
51		_	-		(-		

Sei-whales.

Engl. feet.	Females.
42 51 Sum	$-rac{1}{2}$

Average size: Females: 46.50 feet.

	Num	ber of	Total	Number of		Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
3 0	2	7	9	49	15	_	15
31	1	6	7	50	15	_	15
32	6	17	23	51	22	_	22
33	8	16	24	52	9	_	9
34	13	20	33	53	20	_	20
35	10	34	44	54	9	_	9
36	36	57	93	55	4	_	4
37	36	27	63	56	10	_	10 5
38	30	36	66	57	5	_	5
39	24	35	59	58	4	_	4
40	11	4	15	Sum	404	265	669
41	27	3	30	- Cuin			
42	9		9		(M	ales:	43.06 feet
43	24	$\frac{2}{1}$	26	A	a siza M	anes:	25.00 1001
44	15	1	16	Average	Size F	emales: otal anima	1a. 40.96
45	7	_	7		(т	Juan amma	is: 40.20 "
46	11	-	11	1	. f M	ales: 60.	.39
47	10	_	10	Per	cent { F	ales: 60. emales: 39.	.61
48	11	_	11		(2,	JIII OU	

10. Coast of Peru, pelagic.

		 ٠.	-	 ,
Fin-whales	3.			

Engl. feet.	Male.
58	1

Humpbacks. Engl. feet. Males.

8

Sperm-whales.

Total fort	Num	ber of	Total		Number of		Total
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.
14 29	1 _	_ 1	1 1	49 50	135 151		135 151
$\frac{30}{31}$	-	$egin{array}{c} 1 \ 5 \ 4 \end{array}$	$rac{5}{4}$	$\begin{array}{c} 51 \\ 52 \end{array}$	$\frac{127}{110}$	-	127 110
$\frac{32}{33}$	$\frac{5}{3}$	15 14	$\frac{20}{17}$	53 54	81 69	_	81 69
$\frac{34}{35}$	$\begin{array}{c} 3 \\ 152 \end{array}$	10 190	$\begin{array}{c} 13 \\ 342 \end{array}$	55 56	$\begin{array}{c} \textbf{29} \\ \textbf{28} \end{array}$		$\frac{29}{28}$
$\frac{36}{37}$	$\begin{array}{c} 108 \\ 92 \end{array}$	$\frac{35}{17}$	$\begin{array}{c} 143 \\ 109 \end{array}$	57 58	$\frac{-}{2}$	-	$\frac{-}{2}$
38 39	$\begin{array}{c} 121 \\ 124 \end{array}$	$rac{3}{4}$	$\begin{array}{c} 124 \\ 128 \end{array}$	59 60	<u></u>	_	- 1
40 41	170 133	_	$\begin{array}{c} 170 \\ 133 \end{array}$	Sum	2,589	298	2,887
$\begin{array}{c} 42 \\ 43 \\ 44 \end{array}$	$113 \\ 143 \\ 134$	-	113 143 134	Averag	ge size { F	Iales: 'emales:	44.37 feet 34.88 ,,
45 46	$\begin{array}{c} 166 \\ 138 \end{array}$	- I	166 138		r)	'otal anima Islas - 80	ls: 43.39 ,,
47 48	120 130	-	120 130	$ \text{Per cent} \left\{ \begin{array}{l} \text{Males: } 89.68 \\ \text{Females: } 10.32 \end{array} \right. $.32

II. California.

Fin-whales.

	Number of		Total	Total and a second a second and	Num		Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	Engl. feet. males.		animals.	
52	1	_	1	65	_	_	_	
53	_	_	-	66	-	1	1	
54	_	1	1	67	-	_	_	
55	-	_	_	68	_	1	1	
56	1	_	1	Sum	7	10	17	
57	-	1	1	Sum		10	11	
58	1	1	2	1				
59	_	_	_			Iales:	59.14 feet	
60	1	_	1	Averag		emales:	61.60 ,,	
61	1	1	2	jj.	Γ	otal anima	ds: 60.59 ,,	
62	_	1	1		ſ N	Iales: 41	118	
63	1	2	3	Per	$r \text{ cent } \left\{ \begin{array}{l} \frac{M}{16} \end{array} \right.$	emales: 58	8.82	
64	1	1	2		(1	Cinalics, Oc	,.O2	

Humpbacks.

38 39 40	1 - 1	1 1 -	2 1 1	47 48 Sum		1 8	1 13
$41 \\ 42 \\ 43 \\ 44$	- 1 - 1	$\begin{bmatrix} 2\\2\\1\\- \end{bmatrix}$	$egin{array}{c} 2 \\ 3 \\ 1 \\ 1 \end{array}$	Averag	e size { F	ales: emales: otal anima	42.00 feet 41.75 ,, ls: 41.85 ,,
$egin{array}{c} 44 \ 45 \ 46 \end{array}$	1		1	Per		ales: 38. emales: 61.	46

Sei-whales.

	
Engl. feet.	Females.
40 58 59	1 1 1
Sum	3

Average size: Females: 52.33 feet.

Sperm-whales.

Engl. feet.	Number of males.	Engl. feet.	Number of males.
39 40 48	1 2 1	51 Sum	1 5

Average size: Males: 43.60 feet.

12. Coast of Japan.

Blue-whales.

Engl. feet.	Number of		Total		Number of		Total
	males.	females.	animals.	Engl. feet.	males.	females.	animals.
65 66 67 68 69	- 1 3 - -	2 3 2 - 1	2 4 5 - 1	79 80 81 82 83	 	1 2 - - 1	1 2 - - 1
70	_	-	_	Sum	6	24	30
$71 \\ 72 \\ 73 \\ 74 \\ 75$	1 - -	2 1	1 2 1	Average	$e \text{ size } \{ F \}$	ales: emales: otal anima	69.33 feet 73.79 ,, ls: 72.90 ,,
76 77 78	- 1 -	1 2 6	$\begin{array}{c}1\\3\\6\end{array}$	\mathbf{Per}	$\frac{1}{2}$ cent $\left\{ egin{array}{l} M \\ F \end{array} \right.$	ales: 20 emales: 80	.00

Fin-whales.

	1		-		1	1	1
50	12	13	25	65	4	5	9
51	5	9	14	66	1	7	8
52	5	8	13	67	_	5	5
53	5	4	9	68	_	4	4
$\begin{array}{c} 54 \\ 55 \end{array}$	3	6	9	69	_	2	2
$5\overline{5}$	6	4	10	70	_	1	1
56	12	10	22	71	_	1	1
57	4	7	11	72	_	1	1
58	10	3	13	Sum	128	129	257
59	10	3	13			1	
60	14	7	21			Males:	57.88 feet
61	13	2	15	Avera		Females:	58.78 "
62	10	6	16		()	Fotal anima	als: 58.33 ,,
63	9	11	20	D.		Males: 49	0.81
64	5	10	15	Pe	$\operatorname{er cent} \left\{ \begin{array}{l} 1 \\ 1 \end{array} \right.$	Females: 50	0.19

Humpbacks.

	Number of		Total	
Engl. feet.	males.	females.	animals.	
$\begin{bmatrix} 36 \\ 37 \end{bmatrix}$	1	1	2	
38 39	- 1	-	- 1	Average size $\begin{cases} \text{Males:} & 40.40 \text{ feet} \\ \text{Females:} & 40.00 \end{cases}$
40		_ 1	1	Average size $\begin{cases} \text{Females:} & 40.00 \text{ ,,} \\ \text{Total animals:} & 40.25 \text{ ,,} \end{cases}$
$egin{array}{c} 41 \\ 42 \\ 43 \\ \end{array}$	-	_ 1	- 1	$ ext{Per cent} \left\{ egin{array}{ll} ext{Males:} & 62.50 \ ext{Females:} & 37.50 \end{array} ight.$
44 45	$\frac{-}{2}$		$\frac{-}{2}$	(101111105, 51.50
Sum	5	3	8 .	

Sei-whales.

Engl. feet.	Number of		Total		Number of		Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
35	5	_	5	49	5	4	9	
36	$rac{4}{3}$	7	11	50	1	7	8	
37	3	5	8	51		8	8	
38	9	6	15	52	-	2	2	
39	7	7	14	53	_	. 1	1	
40	10	16	26	54	2	1	3	
41	10	14	24	Sum	157	226	383	
42	16	17	33	- Sum	101		1 000	
43	19	22	41		(M	ales:	43.01 feet	
44	16	22	38	Average	e size { F	emales:	44.15 ,,	
45	23	25	48		T	otal anima	ls: 43.68 ,,	
46	9	20	29	1	•		• • • • • • • • • • • • • • • • • • • •	
47	11	28	39	Per		ales: 40.		
48	7	14	21		(F	emales: 59.	01	

27 28 29 30 31 32 33 34 35	- 1 18 13 11 15 19 20	1 1 2 65 65 69 63 80 62	1 3 83 78 80 78 99 82	47 48 49 50 51 52 53 54 55	22 21 14 23 14 7 5	- - - - - 1	22 21 14 23 14 7 6 2	
36 37 38	21 29 17	43 33 11	64 62 28	56 61 Sum	$\frac{1}{1}$ $\frac{1}{450}$	514	$\begin{array}{ c c }\hline 1\\ \hline 1\\ \hline 964\\ \hline \end{array}$	
$ \begin{array}{r} 39 \\ 40 \\ 41 \\ 42 \\ 43 \end{array} $	$\begin{array}{c c} 16 \\ 26 \\ 21 \\ 26 \\ 19 \end{array}$	$egin{array}{c} 4 \\ 3 \\ 6 \\ 4 \\ - \end{array}$	20 29 27 30 19	$\frac{\text{Average size}}{\text{Average size}} \begin{cases} \frac{\text{Males:}}{\text{Females:}} & \frac{41.31}{33.58} \\ \text{Total animals:} & \frac{37.16}{37.16} \end{cases}$				
44 45 46	20 26 21	1 -	21 26 21	Per		ales: 46. emales: 53		

13. Bonin Island, pelagic.

Blue-whales.

Engl. feet.	Males.
71 72 73	$\frac{2}{2}$
Sum	4

Average size: Males: 72.00 feet.

Humpbacks.

Engl. feet.	Female.
44	1

Sei-whales.

Engl. feet.	Number of		Total	# 	Number of		Total
	males.	female s	animals.	Engl. feet.	males.	females.	animals.
35	2	1	3	47	1	5	6
36	6	4	10	48	3	3	6
37	3	3	6	49		2	2
38	4	3	7	59	1	_	1
39 40	$\frac{3}{10}$	$\begin{bmatrix} 8 \\ 2 \end{bmatrix}$	$\frac{11}{12}$	Sum	82	68	¹) 150
41 42 43 44	11 12 7 9	$\begin{array}{c} 3\\ 9\\ 12\\ 5 \end{array}$	14 21 19 14	Average s	$ ext{fize} \left\{ egin{array}{l} ext{Mal} \ ext{Fen} \ ext{Tot} \end{array} ight.$	es: nales: al animals:	41.74 feet 42.24 ,, 41.97 ,,
45 46	5 5	$\begin{bmatrix} & 5 \\ 6 \\ 2 \end{bmatrix}$	14 11 7	Per ce	$_{\mathrm{ent}} \left\{egin{array}{l} \mathrm{Mal} \ \mathrm{Fen} \end{array} ight.$	es: 54.6 nales: 45.3	7 3

^{1) 8} sei-whales have been lost.

Sperm-whales.

			operm	Wilaiss.			
27	1	_	I	47	2		2
$\frac{21}{28}$	•		_	48	_		_
$\frac{20}{29}$	_	1	1	49	$\frac{}{3}$		3
	-	1	1 0		-	_	
30	2	l l	3	50	2		2
31	1	1	2	51	1	_	1
32	-	-	_	52	_	-	_
33	1	$\frac{2}{3}$	3	53	_	_	
34	2	3	5	54	3	_	3
35	18	39	57	55		_	
36	3	51	54	56	_	_	_
37	8	32	40	57	1	_	1
38	3	7	10	Sum	58	137	¹) 195
39	_	-	-	Buill		197	199
40	1		1				
41	3	_	3		∫ Mal		39.14 feet
42	2		2	Average		nales:	35.83 "
43	-	-			[Tot	al animals	: 36.82 ,,
44	_	_	_	_	, (Mal	es: 29.7	4
45	1	_	1	Per o	ent { Fen	nales: 70.2	<u>.</u>
46		_	_		(T C II		

^{1) 6} sperm-whales have been lost.

14. Summary Pacific North.

65 66 67 68 69	- 1 3 -	$\begin{array}{c} 2\\ 3\\ 2\\ -\\ 1 \end{array}$	2 4 5 -	79 80 81 82 83	 - -	1 2 - -	1 2 - -
$70 \\ 71 \\ 72 \\ 73$	$\begin{bmatrix} -2\\1\\2 \end{bmatrix}$	- - - 2	2 1 4	Sum	ge size ∫ H	Tales:	70.40 feet 73.79 ,,
74 75 76 77 78	- - 1 -	$\begin{bmatrix} 1\\ -\\ 1\\ 2\\ 6 \end{bmatrix}$	1 1 3 6	Pe	`	Cotal anima Iales: 29 Females: 70	•

Engl. feet.	Number of		Total		Number of		Total	
	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
50	12	13	25	65	4	5	9	
51	5	9	14	66	1	8	9	
52	6	8	14	67	-	5	5	
53	5	4	9	68	-	5	5	
54	3	7	10	69	_	2	2	
55	6	4	10	70	_	1	1	
56	13	10	23	71	_	1	1	
57	4.	8	12	72	-	1	1	
58	11	4	15	Sum	135	139	274	
59	10	3	13	- 20111				
60	15	7	22			Males:	57.94 feet	
61	14	3	17	$ \text{Average size } \{$		Females:	58.99 ,,	
62	10	7	17		l	Total anima	als: 58.47 ,,	
63	10	13	23	Dos		Males: 49	0.27	
64	6	11	17	Per	$r \text{ cent } \left\{ \right.$	Females: 50	0.73	

Humpbacks.

36 37 38 39	1 1 1	1 - 1	$\begin{bmatrix} 2\\1\\2\\2 \end{bmatrix}$	47 48 Sum	10	$\begin{array}{ c c }\hline -\\ \hline 1\\ \hline 12\\ \hline \end{array}$	$\begin{array}{ c c }\hline 1\\\hline 22\\\hline \end{array}$
40 41 42 43 44 45 46	1 - 1 - 1 2	3 2 2 1	1 3 3 2 2 2	Average Per o			,,

Sei-whales.

35	7	7	0	F0.		0	2		
$\frac{35}{36}$	10	11	$\frac{8}{21}$	52 53	_	$\frac{2}{1}$			
37	6	8	14	54	$\frac{1}{2}$	1.	3		
38	13	$\ddot{9}$	22	55		_	_		
39	10	15	25	56	_	_			
40	20	19	39	57	_	-			
41	21	17	38	58	_	1	1		
42	28	26	54	59	1	1	2		
43	26	34	60	Sum	239	297	536		
44	25	27	52		200	201	(000		
45	28	31	59		(Mal	es•	42.58 feet		
46	14	22	36	Average		iales:	43 70		
47	12	33	45	nverage	Tot	al animals:	43.25		
48	10	17	27		(100	ai aiiiiiais.	. 10.20 ,,		
49	5	6	11	_	. f Mal	es: 44.59	9		
50	1	7	8	Per cent { Females: 44.55 Females: 55.41					
51		8	8		(101	1010D, 00.T.	L		

7	Num	ber of	Total		Num	ber of	Total	
Engl. feet.	males.	females.	animals.	Engl. feet.	males.	females.	animals.	
27	1	1	2	49	17	_	17	
28	-	ĩ	ī	50	$\hat{25}$		25	
29	1	3	$\tilde{4}$	51	16	_	16	
30	20	66	86	52	7	_	7	
31	14	66	80	53	5	1	6	
32	11	69	80	54	5	_	6 5	
33	16	65	81	55	1	_	1	
34	21	83	104	56	1	_	1	
35	38	101	139	57	1		1	
36	24	94	118	58	_	_	_	
37	37	65	102	59	-	_	_	
38	20	18	38	60	_	_	_	
39	17	4	21	61	1	_	1	
40	29	3	32	Sum	513	651	1,164	
41	24	6	30	Sum	919	091	1,104	
42	28	4	32		(Mal	02.	41.09 feet	
43	19	- 1	19	Arronago	rizo Mai	es:	24.03 1000	
44	20	1	21	Average	Tot	nales: al animals	34.01 ,, . 27.12	
45	27	-	27	1	ίτοι	ai ammais	: 31.13 ,,	
46	21	-	21	-	, [Mal	es: 44.0	7	
47	24	-	24	Per c	ent { Fen	es: 44.0 nales: 55.9	3	
48	22	-	22	H	(= 01		-	

15. Coast of West Australia.

Humpbacks.

Engl. feet.	Num	Total	
	males.	females.	animals.
36	1	_	1
39	_	1	1
Sum	1	1	2

Average size: Total animals: 37.50 feet.

Table No. 7.—Average production of oil per "blue-whale equivalent" in the summer season 1947.

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.

		The second	Oil pr	roduction.
Geographical areas.	Company.	Blue-whale equivalents.	Total.	Per blue-whale equivalent.
Atlantic and Arctic:— Coast of Norway	No. 1	53.3	3,820	Barrels.¹) 71.7
Faroe Islands New Foundland Coast of Portugal	, 2 , 3 , 1 , 2 , 1	43.0 59.2 60.8 40.5 79.3 144.3 55.5	2,701 3,509 3,669 1,996 6,490 10,898 2,898	62.8 59.3 60.3 49.3 81.8 75.5 52.2
Average				67.1
Coast of Africa:— Coast of Natal	No. 1 ,, 1	316.3 40.7	30,002 1,918 —	94.9 47.1 89.4
Coast of Chile	" 1	70.1	3,676	52.4
Pacific North:— California	" 1	14.2	1,225	86.3

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

Table No. 8.—Average production of oil per sperm-whale in the summer season 1947.

		Number of	Oil pro	duction.
Geographical areas.	Company.	sperm-whales.	Total.	Per sperm-whale.
Atlantic and Arctic:— Coast of Norway Faroe Islands New Foundland Coast of Portugal Azores Madeira Average	No. 1 , 2 , 3 , 1 , 2 , 1 , 2 , 1 , 1 , 1 , 1	2 5 9 2 13 16 2 50 465 109	Barrels. 137 300 404 100 521 1,102 110 1,080 12,974 2,585	88.5 60.0 44.9 50.0 40.1 68.9 55.0 21.6 27.9 23.7
Coast of Africa:— Coast of Natal Cape Colony Average	No. 1	502 48 —	14,272 1,485 —	$ \begin{array}{r} 28.4 \\ 30.9 \\ \hline 28.6 \end{array} $

		Number of	Oil pro	duction
Geographical areas.	Company.	sperm-whales.	Total.	Per sperm-whale.
		1	Parrels.	Barrels.
Coast of Chile	No. 1	669	19,160	28.6
Coast of Peru, pelagic	No. 1	2,471	91,782	37.1
, 1 8	,, 2	416	14,204	34.1
Average				36.7
Pacific North:—				
California	No. 1	5	140	28.0

Table No. 9.—Whale foetuses measured in the summer season 1947.

Blue-whale foetuses

Geographical areas.	Date when	Length.		Sex.	Garage Nicel and a	Date when	Length.		Sex.
	meas- ured.	Mother.	Foetus.		Geographical areas.	meas- ured.	Mother.	Foetus.	Jea.
Coast of West		Engl. ft.	Engl. ft.				Engl. ft.	Engl. ft.	
Greenland.	26/7	73	4'0"	-	Coast of Japan.	7/9	77	17′0″	M

Fin-whale foetuses.

Coast of Norway. Average le ng(h of foetuses: 4'7"	$\begin{array}{c} 9/6 \\ 13/6 \\ 17/7 \\ 19/7 \\ 27/7 \\ 1/8 \\ 5/8 \end{array}$	63 67 66 66 62 65 64	5'0" M 8'0" F 1'0" F 1'0" M 5'0" M 10'0"	Coast of West Greenland. Average length of foetuses: 7'3"	18/6 20/9 30/9 14/10	62 63 59 63	4' 0" 7' 0" 3' 0" 15' 0"
	9/8	65	5′0″ F	New Foundland.	4/8	66	6'0" F
Faroe Islands. Average length of foetuses: 8'4"	$\begin{array}{c} 16 \Big/ 5 \\ 22 \Big/ 5 \\ 30 \Big/ 5 \\ 24 \Big/ 6 \\ 8 \Big/ 7 \\ 10 \Big/ 7 \\ 2 \Big/ 8 \\ 3 \Big/ 8 \\ 12 \Big/ 8 \\ 14 \Big/ 8 \\ 30 \Big/ 8 \\ 30 \Big/ 8 \\ 31 \Big/ 8 \\ 30 \Big/ 9 \\ \end{array}$	66 68 66 71 65 64 71 61 71 52 65 72 62 60 63 60 62	0'1" 5'0" 7'0" 6'6" 2'6" 4'0" 8'0" [10'0" 10'0" 7'6" 13'0" 14'0" 9'0" 7'0" 11'0" 5'0" 7'0" M	Average length of foetuses: 9'0"	5/8 8/8 ., 10/8 18/8 27/8 2/9 ., 7/9 11/9 11/9 5/10 6/10 7/10 .,	70 64 67 63 72 68 62 68 67 62 70 67 65 66 68 67 63 61 71 64	5'0" M 5'0" F 4'0" M 6'0" F 11'0" F 13'0" M 12'0" M 10'0" F 6'0" M 6'0" F 8'0" F 8'0" M 15'0" M 15'0" M 15'0" M
	$\frac{20}{9}$ $\frac{2}{10}$	$\begin{array}{c} 62 \\ 68 \end{array}$	10′ 0″ 15′ 0″		8/ ₁₀	$65\\64$	8'0" F 12'0" M

Geographical areas.	Date Length.		Sex. Geographical areas.		Date when	Len	gth.	Sex.	
Geographical areas.	meas- ured.	Mother.	Foetus.	DUA.	deograpmear areas.	meas- ured.	Mother.	Foetus.	Sca.
	1	Engl. ft.	Engl. ft.			1	Engl. ft.	Engl. ft.	
California.	23/ ₇ 23/ ₈	68 66	5' 6" 10' 0"	M M	Coast of Japan	26/ ₇	66 64	11′ 0″ 10′ 10″	F
Average length of foetuses: 9' 2".	30/8 19/9 27/9	64 62 63	$\begin{vmatrix} 13'3'' \\ 4'11'' \\ 12'0'' \end{vmatrix}$	F M F	Average length of foetuses: 10'7"	30/9	53	10′ 0″	F

Humpback-foetuses.

California. Average length of foetuses: 5'4".	4/9 25/10	39 43	5'8" 5'0"	M M	Coast of Japan.	7/1	41	12′0″	M
---	--------------	----------	--------------	--------	-----------------	-----	----	-------	---

Sei-whale foetuses.

Cape Colony. Average length of foetuses: 1'7".	16/8 17/8 18/8 31/8 30/10	45 50 46 51 45 49	2'6" 0'6" 0'10" 2'3" 0'6" 1'7" 3'2"	F M	Bonin Island. Average length of foetuses: 2' 4".	30/3 5/4 9/4 11/4 15/4	44 47 48 43 43 42 43	3'3" M 1'7" M 2'2" F 1'2" M 3'5" F 2'9" F 2'6" F
Coast of Japan. Average length of foetuses: 8'11".	26/6 16/7 10/9 13/9 21/9 21/9	47 47 47 47 47 46 46 46	6'5" 6'6" 9'5" 8'0" 11'0" 8'0" 10'0" 12'0"	F F F M M		16/4 17/4 20/4 1/5	43 42 43 42	2' 6" F 2' 1" F 1' 1" M 2' 11" F

Sperm-whale foetuses.

Coast of Chile. Average length of foetuses: 6' 5".	1/2 13/2 19/2 19/2 14/3 22/3	34 38 36 39 36 36 36 39 35 35	4' 7" M 4' 7" M 2' 11" F 9' 2" F 3' 11" M 13' 1" F 13' 1" M 4' 1" M 4' 1" M	Coast of Peru. Average length of foetuses: 10′ 3″.	19/6 12/7 27/7 6/8 12/8	37 32 36 37 33 35 35 35 35	6'0" 6'0" 6'0" 9'0" 9'0" 8'0" 11'6" 9'0"	M M M M F F
	14/3		10 1		12/8			
	1 ,, 1		10 .					
	22/3		1 1 1		,,			
	,,,		1 0 1 1 1 1		,,			
	/4	36	1 1 - 1		,,	37	8'0"	\mathbf{F}
	27/4	40	6' 11" M		1	35	10'6"	F
	5/5	33	4' 11" M		7/9	32	9'0"	\mathbf{F}
	,,	33	5′11″ F		29/9	35	9'0"	\mathbf{F}
	,,	38	2'7" F		9/10	36	15'0"	\mathbf{F}
	23/11	32	9' 10" M		,,	35	14'0"	F
	9/12	32	9'10" M			35	12'0"	\mathbf{F}
	,,	36	2'1" M		10/10	36	15'0"	\mathbf{F}

Table No. 9 (continued).

Geographical areas.	when meas-	1		Sex.	Geographical areas.				Sex
Geographical areas.		Mother.	Foetus.	Sex.	Geographical areas.	when meas- ured.	Mother.	Foetus.	
	ĺ	Engl. ft.	Engl. ft.	1 1			Engl. ft.	Engl. ft.	<u>' </u>
Toget of Dome.	10/10	35	12'0"	\mathbf{F}	Coast of Japan	6/10	36	5'0"	M
Coast of Peru	12/10	35	10′0″	M	(cont.).	17/	31	10'5"	M
(cont.).	,,,	35	12'0"	M	' '	40/	33	2'2"	M
		35	14'0"	F	ļi	20/11	31	5'6"	F
	,,	35	9'0"	M		22/11	38	6'6"	F
	13," 10	35	8'0"	M		/11 29/	31	4'9"	M
	14/	36	15'0"	M		29/11	32	6'8"	M
	14/10	35		1		8,7			
	8/11		12'0"	M		6/12	35	4'0"	M
	,,	36	8'0"	M		,,	35	7′0″	M
	- '7	37	10′0″	M	,				
	9/11	35	10′0″	M					1
	9/12	35	12'0"	\mathbf{F}	Bonin Island.	1/3	36	9′11″	F
	,,	35	11'0"	M	A 11	5/	35	6'5"	M
		35	9′0″	M	Average length	8/_	35	8′10″	F
	,,	35	12'0"	F	of foetuses:	$^{12}/_{3}^{3}$	34	1'2"	M
	**	35	10'0"	F	9' 6"		35	12' 11"	F
	,,	31	5'0"	1		"	36	6'11"	M
		32	14'6"	l		"	38	10'5"	M
	1	02	14.0			21/3			
7	E /	. 00	0/0"	3.5		27/3	35	9'11"	M
Coast of Japan.	5/1	32	8′0″	M		27/3	37	8'0"	M
Average length	20/5	30	12′0″	M		28/3	37	8'0"	M
of foetuses:		30	12′0″	М		8/	36	10′9″	M
6' 2"	14/6	33	13′0″	\mathbf{F}	1	12/4	36	0'2"	M
0 4	15/	30	1'6"	M		13/4	35	0'1"	
	12/7	31	12'0"	M			36	10'4"	M
	13/7	34	1'0"	M		15/4	35	11'11"	M
	1	35	13'0"	F	1		35	11'11"	M
	,,	30	2'0"	F	:	17/4	37	11'3"	F
	"	38	13'0"	F			36	12'4"	$\tilde{\mathbf{F}}$
	24/7		0'6"	M		"	37	11' 10"	F
	27/7	36	12'0"		İ	18/4	37	11'11"	F
	27/7	34		F	l i	10/4			_
	2,7,	34	1'9"	F		19/4	37	0'3"	M
	18/8	37	13' 0"	M		,,	35	2'0"	F
	27/8	32	3′ 5″	M		,,	36	11′ 10″	F
		36	4'0"	$ \mathbf{F} $		23/4	36	10′ 10″	\mathbf{F}
	7/9	40	15'0''	M	·	1/5	35	15′ 10″	\mathbf{F}
		31	4'0"	M	İ	4/5	37	9'11"	M
	;;	34	1'0"	F	-	1	35	11'11"	\mathbf{F}
	**	$3\overline{4}$	12'0''	M		5/5	35	11'11"	$\overline{\mathbf{F}}$
	,,	32	2'0"	F		8/5		12' 11"	F
	,,	33	3'0"	M		9,5		10' 11"	F
	,,					9/5		12' 11"	F
	,,	34	2′0″	F		18/5			
	,,	36	3′0″	M		,,	36	8'11"	F
	27,	30	4′0″	M	i	2,,	35	9'11"	F
	*/ ₉	36	4'0"	F		21/5		12′ 11″	M
	19/9	34	2'6"	M		23/5		13′4″	M
		31	3'6"	\mathbf{F}	İ	24/5		12'4"	M
	3/10	31	4'8"	M		,,	36	13′ 1″	M
	5/10	33	4'2"	M				12'5"	$\overline{\mathbf{F}}$
	6/10	34	9'0"	M		"	36	0'8"	F

