

INTERNATIONAL
WHALING STATISTICS
LXIV

EDITED BY
THE COMMITTEE FOR WHALING STATISTICS



OSLO 1970

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CONTENTS

Preface	Page	5
Introduction	"	7
Table No. 1.—Whaling results for the various countries in the Antarctic in the season 1968/69.....	"	27
Table No. 2.—Average size of whales caught in the Antarctic in the season 1968/69.....	"	27
Table No. 3.—Whales caught in the Antarctic in the season 1968/69, by species, sex and size	"	28
Table No. 4.—Whales caught in the Antarctic in the season 1968/69, by species, sex and groups of size	"	30
Table No. 5.—Average production of whale oil per blue-whale unit in the Antarctic in the season 1968/69	"	30
Table No. 6.—Size of pregnant whale females caught in the Antarctic in the season 1968/69.....	"	31
Table No. 7.—Whale foetuses measured in the Antarctic in the season 1968/69, by species and groups of size, in each month	"	32
Table No. 8.—Whale foetuses measured in the Antarctic in the season 1968/69, by species and sex, in each month	"	33

P R E F A C E

The present publication, International Whaling Statistics No. LXIV, embraces the results of the Antarctic whaling during the season 1968–69.

The statistical data in this publication are based on the reports sent in to the Bureau of International Whaling Statistics, Sandefjord.

Oslo, December 1969.

Gunnar Jahn.

Birger Bergersen.

Einar Vangstein.

INTRODUCTION

Regulative provisions.

At the twentieth meeting of the International Whaling Commission in Tokyo in 1968 it was decided that the pelagic catch limit for the 1968–69 Antarctic season should remain the same as in the previous season, namely 3,200 blue-whale units. The decision is in accordance with the policy adopted by the Commission in 1966 that the total catch should be less than the combined sustainable yields of the fin- and sei-whale stocks as determined on the basis of more precise scientific evidence.

The national quota allocation for the season 1968–69 was as follows:

Japan	1,493	blue-whale units
U.S.S.R.	976	—,,—
Norway.....	731	—,,—
<hr/>		
Total	3,200	blue-whale units

As will be seen from the following tables Norway was not operating in the Antarctic in the season 1968–69.

The most important regulations governing the pelagic whaling in the Antarctic season 1968–69 were as follows:

1. The open season for the taking of fin- and sei-whales was from December 12th to April 7th, both days inclusive.
2. The open season for taking of sperm-whales was 8 months.
3. It was forbidden to take fin-whales under 57 feet, sei-whales under 40 feet and sperm-whales under 38 feet. Further it was forbidden to kill blue-whales, humpback whales, right-whales, grey-whales and female whales accompanied by a calf.
4. The number of baleen whales taken during the open season in waters south of 40° South Latitude by whale catchers attached to factory ships under jurisdiction of the Contracting Governments should not exceed 3,200 blue-whale units in 1968–69. (As one blue-whale unit is reckoned 2 fin-whales or 6 sei-whales.)

Whaling period.

The survey below shows the whaling period for baleen whales in the season 1968–69, specified for each expedition:

Expeditions	Whaling period	Catching days
Japanese:		
Kyokuyo Maru No. 3	December 12th–March 22nd	101
Nisshin Maru No. 3	December 12th–March 13th	92
Tonan Maru No. 2	December 12th–March 1st	80
 U.S.S.R.:		
Juri Dolgorukij	December 15th–March 30th	106
Sovietskaya Rossia	December 12th–March 28th	107
Sovietskaya Ukraina	December 12th–March 27th	105
		<hr/> Average 99

The whaling period and the number of catching days permitted for the pelagic baleen whaling operations in the seasons 1959/60–1968/69 have mostly been from December 12th to April 7th, i.e. ca. 117 days.

In these 10 seasons some of the expeditions closed their baleen whaling operations at an earlier date. The average catching periods were therefore as follows:

Seasons	Average catching period	Seasons	Average catching period
1959–60	99 days	1964–65	104 days
1960–61	95 „	1965–66	103 „
1961–62	115 „	1966–67	97 „
1962–63	110 „	1967–68	101 „
1963–64	111 „	1968–69	99 „

Whaling matériel.

In the pelagic whaling during the Antarctic season 1968–69 6 floating factories with a total of 84 catching boats were in operation. This was two floating factories less than in the previous season, as the Norwegian factory ship "Kosmos IV" and the Japanese factory ship "Nisshin Maru" were not taking part this season. Further the Japanese factory ship "Kyokuyo Maru No. 3" was replaced by "Kyokuyo Maru No. 2".

The number of floating factories and catchers operated by the respective countries during the last 3 seasons will be seen from the survey on top of next page.

Countries	Season 1966-67		Season 1967-68		Season 1968-69	
	Floating factories	Catchers	Floating factories	Catchers	Floating factories	Catchers
Japan	4	44	4	43	3	38
U.S.S.R.	3	55	3	49	3	46
Norway	2	21	1	5	—	—
Total	9	120	8	97	6	84

Table a, below, gives the number of floating factories and catchers engaged in pelagic whaling since the season 1959-60. The table also shows the average gross tonnage of the floating factories and the average tonnage and engine power of the catchers.

Table a.—Number and gross tonnage of floating factories and catchers engaged in pelagic whaling in the Antarctic 1959/60—1968/69.

Seasons	Floating factories			Catchers			
	Number	Gross tonnage	Average gross tonnage per fl. factory	Number	Gross tonnage	Average per catcher of:	
						Gross tonnage	I.H.P.
1959-60	20	357,574	17,879	220	139,266	633	2,557
1960-61	21	378,835	18,040	252	161,808	642	2,614
1961-62	21	406,402	19,352	261	170,870	657	2,723
1962-63	17	354,581	20,858	201	141,327	703	2,957
1963-64	16	339,132	21,196	190	134,751	709	3,011
1964-65	15	312,302	20,820	172	123,005	715	3,041
1965-66	10	217,112	21,711	128	95,122	743	3,226
1966-67	9	197,793	21,977	120	90,788	757	3,270
1967-68	8	178,625	22,328	97	74,630	769	3,377
1968-69	6	143,078	23,846	84	65,755	783	3,448

From the following survey will be seen the number of floating factories, the number of catchers and the average number of catchers engaged per floating factory from and including the season 1959-60.

Seasons	Number of floating factories	Number of catchers	Average number of catchers per floating factory
1959-60	20	220	11.0
1960-61	21	252	12.0
1961-62	21	261	12.4
1962-63	17	201	11.8
1963-64	16	190	11.9
1964-65	15	172	11.5
1965-66	10	128	12.8
1966-67	9	120	13.3
1967-68	8	97	12.1
1968-69	6	84	14.0

The following survey shows the average number of catchers per floating factory specified for each country during the last three seasons:

Countries	Average number of catchers per floating factory		
	Season 1966—67	Season 1967—68	Season 1968—69
Japan	11.0	10.8	12.7
U.S.S.R.	18.3	16.3	15.3
Norway	10.5	5.0	—
Average	13.3	12.1	14.0

Catch results.

During the Antarctic season 1968—69 the pelagic expeditions caught in all 11,478 whales, of which 16 were lost. Thus the number of whales actually processed was 11,462, as will be seen from the following survey:

Species of whales	Whales captured	Lost whales	Processed whales	Captured whales in blue-whale units
Fin-whales	3,020	6	3,014	1,510.0
Sei-whales	5,776	6	5,770	962.6
Total baleen whales	8,796	12	8,784	2,472.6
Sperm-whales	2,682	4	2,678	—
Total of whales	1) ¹⁾ 11,478	16	11,462	2,472.6

¹⁾ In addition a total of 59 minke-whales and 1 bottlenose were caught.

The pelagically caught baleen whales (excl. small whales) converted into blue-whale units amounted to 2,472.6 units in the season 1968—69. The survey below shows the total catch in blue-whale units and the agreed global quota from and including the season 1959—60:

Seasons	Catch in blue-whale units	Agreed global quota Blue-whale units
1959—60	15,511.7	15,000
1960—61	16,433.5	1) ¹⁾ —
1961—62	15,252.6	1) ¹⁾ —
1962—63	11,306.1	15,000
1963—64	8,429.0	10,000
1964—65	6,986.1	8,000
1965—66	4,090.9	4,500
1966—67	3,511.8	3,500
1967—68	2,803.7	3,200
1968—69	2,472.6	3,200

¹⁾ No global quota.

In the season 1968—69 the pelagic expeditions in the Antarctic processed 2,468.7 blue-whale units yielding 272,058 barrels of whale-oil, and 2,678 sperm-whales yielding 113,764 barrels of sperm-oil.

The pelagic catch in blue-whale units in the last four seasons apportioned between the individual countries was as follows:

Countries	Catch in blue-whale units			
	Season 1965-66	Season 1966-67	Season 1967-68	Season 1968-1969
Japan	2,340.1	1,639.2	1,493.0	1,493.0
U.S.S.R.	921.6	1,071.1	1,018.7	979.6
Norway	829.2	801.5	292.0	-
Total	4,090.9	3,511.8	2,803.7	2,472.6

The total whaling results in the Antarctic from 1959-60 up to and including 1968-69 are given in table b, below. In table c below the pelagic results during the same period have been recorded separately.

Table b.—Total whaling in the Antarctic.

Years.	Species of whales caught.						Total of whales.	Oil production.	Expeditions.			Number of whales per boat.	
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.			Shore stations.	Floating factories.	Catchers.		
1959-60	1,239	27,575	1,338	4,309	4,227	-	38,688	2,148,438	3	20	241	161	
1960-61	1,744	28,761	718	5,102	4,800	¹⁾ 2	41,127	2,232,884	3	21	268	153	
1961-62	1,118	27,099	309	5,196	4,829	¹⁾ 1	38,552	2,051,776	1	21	269	143	
1962-63	947	18,668	270	5,503	4,771	-	30,159	1,495,779	-	17	201	150	
1963-64	112	14,422	2	8,695	6,711	-	29,942	1,340,758	2	16	194	154	
1964-65	20	7,811	-	20,380	4,352	-	32,563	1,063,416	2	15	177	184	
1965	66	1	2,536	1	17,587	4,555	-	24,680	644,263	1	10	128	193
1966-67	4	2,893	-	12,368	4,960	-	20,225	600,666	-	9	120	169	
1967-68	-	2,155	-	10,357	2,568	-	15,080	426,497	-	8	97	155	
1968-69	-	3,020	-	5,776	2,682	-	11,478	385,822	-	6	84	137	

¹⁾ Right-whales.

Table c.—Pelagic whaling in the Antarctic.

Years.	Species of whales caught.						Total of whales.	Oil production.	Expeditions.			Number of whales per boat.
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.			Shore stations.	Floating factories.	Catchers.	
1959-60	1,230	26,415	1,338	3,234	4,138	-	36,355	2,050,892	-	20	220	165
1960-61	1,740	27,374	718	4,310	4,666	¹⁾ 2	38,810	2,123,157	-	21	252	154
1961-62	1,118	26,438	309	4,749	4,743	¹⁾ 1	37,358	2,001,961	-	21	261	143
1962-63	947	18,668	270	5,503	4,771	-	30,159	1,495,779	-	17	201	150
1963-64	112	13,870	2	8,286	6,651	-	28,921	1,299,476	-	16	190	152
1964-65	20	7,308	-	19,874	4,211	-	31,413	1,017,611	-	15	172	183
1965-66	1	2,318	1	17,583	4,538	-	24,441	634,299	-	10	128	191
1966-67	4	2,893	-	12,368	4,960	-	20,225	600,666	-	9	120	169
1967-68	-	2,155	-	10,357	2,568	-	15,080	426,497	-	8	97	155
1968-69	-	3,020	-	5,776	2,682	-	11,478	385,882	-	6	84	137

¹⁾ Right-whales.

Of sperm-whales a total of 2,682 animals was in 1968-69 caught in the Antarctic (South of 40° S.). In addition the pelagic expeditions captured 1,225 sperm-whales in waters north of 40° South Latitude.

The survey *below* shows the total catch of sperm-whales on voyage to the Antarctic, in the Antarctic (i.e. south of 40° South Lat.) and on voyage from the Antarctic, specified for each country during the last 3 seasons:

Seasons Countries	Number of sperm-whales caught in the pelagic whaling				Total
	On voyage to the Antarctic N. of 40° S.	In the Antarctic S. of 40° S.	On voyage from the Antarctic N. of 40° S.		
1968-69 U.S.S.R.	1,098	2,682	127	3,907	
1967-68 Japan	10	104	-	114	
U.S.S.R.	1,256	2,390	22	3,668	
Norway	-	74	-	74	
Total	1,266	2,568	22	3,856	
1966-67 Japan	85	357	5	447	
U.S.S.R.	1,108	4,008	81	5,197	
Norway	55	595	-	650	
Total	1,248	4,960	86	6,294	

Table d, page 13, illustrates the relation between the various species of whales killed in pelagic whaling in the Antarctic from 1959-60. During the three last seasons 1968-69, 1967-68 and 1966-67 the fin-whale catch represented 26, 14 and 14 per cent of the total catch compared with about 71 per cent during the three first 1960-seasons. On the other hand the sei-whale catch, during the 3 last seasons, represented 50, 69 and 61 per cent of the total catch, compared with about 11 per cent during the 3 first 1960-seasons.

Table e, page 13, gives i.a. the average daily production of whale oil per floating factory as well as per catcher. The average daily production of whale-oil per floating factory in 1968-69 amounted to 460 barrels as against 399 and 439 barrels in the two preceding seasons. During the ten seasons 1949/50-1958/59 the corresponding figures varied between 1,266 and 1,690 barrels of whale-oil.

The average daily production of whale-oil per catcher in 1966-67, 1967-68 and 1968-69 was 33 barrels, which is the lowest result ever recorded in pelagic whaling.

The survey on top page 13 shows the catch between each 10 degrees latitude in the Antarctic for the seasons 1958-59 and 1965/66-1968/69. Between 40°-50° South Lat. the catch in 1968/69 resulted in 1,186 blue-whale units, and this represents about 48 per cent of the total catch, as compared with about 58 per cent in the season 1966-67 and about 70 per cent in 1965-66.

Catch in blue-whale units	Season 1958/59		Season 1965/66		Season 1966/67		Season 1967/68		Season 1968/69	
	Number	Per cent								
40°—50° S. Lat.	—	—	2,868	70	2,029	58	1,115	40	1,186	48
50°—60° " "	5,299	35	639	16	543	15	1,065	38	867	35
60°—70° " "	9,194	60	578	14	894	26	621	22	417	17
70°—80° " "	741	5	—	—	41	1	—	—	—	—
Total	15,234	100	4,085	100	3,507	100	2,801	100	2,469	100

(To be continued on page 16.)

Table d.—Whales caught in the pelagic whaling. Percentage figures.

Seasons	Blue.	Fin.	Hump back.	Sei.	Sperm	Total.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1959-60	3.4	72.6	3.7	8.9	11.4	100
1960-61	4.5	70.5	1.9	11.1	12.0	100
1961-62	3.0	70.8	0.8	12.7	12.7	100
1962-63	3.1	61.9	0.9	18.3	15.8	100
1963-64	0.4	48.0	—	28.6	23.0	100
1964-65	—	23.3	—	63.3	13.4	100
1965-66	—	9.5	—	71.9	18.6	100
1966-67	—	14.3	—	61.2	24.5	100
1967-68	—	14.3	—	68.7	17.0	100
1968-69	—	26.3	—	50.3	23.4	100

Table e.—Average production per floating factory and catcher in the pelagic whaling in Antarctic 1959/60—1968/69.

Seasons.	Total production of whale oil.	Total number of fl. fact.	Average production per fl. fact.	Catching days.		Total production per day for the whole fleet.	Average production per floating factory's day-work.
				Total.	Aver- age.		
	Barrels.			Barrels.		Barrels.	Barrels.
1959-60	1,859,375	20	92,969	1,973	99	18,782	942
1960-61	1,915,118	21	91,196	2,004	95	20,159	956
1961-62	1,797,178	21	85,580	2,415	115	15,628	744
1962-63	1,293,491	17	76,088	1,878	110	11,759	689
1963-64 ¹⁾	1,016,670	15	67,778	1,663	111	9,159	611
1964-65	844,457	15	56,297	1,554	104	8,120	543
1965-66	448,020	10	44,802	1,034	103	4,350	433
1966-67	383,888	9	42,654	874	97	3,958	439
1967-68	321,953	8	40,244	806	101	3,188	399
1968-69	272,058	6	45,343	591	99	2,748	460

Seasons.	Total production of whale oil.	Total number of catchers.	Average production per catcher.	Catching days.		Average oil production per catcher's day-work.	Average number of whales caught ¹⁾ per catcher's day work ¹⁾
				Total.	Average per catcher		
	Barrels.			Barrels.		Barrels.	
1959-60	1,859,375	220	8,452	21,356	97	87	1.51
1960-61	1,915,118	252	7,600	23,998	95	80	1.42
1961-62	1,797,178	261	6,886	29,952	115	60	1.09
1962-63	1,293,491	201	6,435	22,504	112	57	1.13
1963-64 ¹⁾	1,016,670	180	5,646	19,876	110	51	1.10
1964-65	844,457	172	4,910	17,475	102	48	1.56
1965-66	448,020	128	3,500	13,122	103	34	1.52
1966-67	383,888	120	3,199	11,760	98	33	1.30
1967-68	321,953	97	3,319	9,785	101	33	1.28
1968-69	272,058	84	3,239	8,327	99	33	1.05

¹⁾ Excl. one expedition, which mostly caught sperm-whales. ²⁾ Not including sperm-whales.

In tables f and g, pages 14 and 15, the monthly catch of the various species of whales is recorded in absolute and percentage figures.

Table f.—Antarctic, pelagic whaling. Catch by months in absolute figures.

Species of whales, and seasons.	Nov.	Dec.	Jan.	Feb.	March.	April.	Total.	The Whal- ing Statistics' total figures.	
<i>Total animals.</i>	1959-60..	359	4,464	12,917	10,710	6,584	1,144	36,178	36,355
	1960-61..	1,086	4,104	12,445	11,491	8,559	996	38,681	38,808
	1961-62..	1,356	5,431	10,135	9,458	9,857	985	37,222	37,357
	1962-63..	1,307	4,988	7,805	8,499	6,223	1,267	30,089	30,159
	1963-64..	1,158	4,534	8,874	7,840	5,331	1,125	28,862	28,921
	1964-65..	365	4,192	10,035	10,096	5,856	822	31,366	31,413
	1965-66..	178	4,328	7,443	6,513	4,711	1,231	24,404	24,441
	1966-67..	368	4,207	5,462	5,795	3,225	1,142	20,199	20,225
	1967-68..	10	2,326	4,641	4,189	2,892	1,012	15,070	15,080
	1968-69..	-	2,706	3,665	2,666	1,353	1,072	11,462	11,478
<i>Blue- whales.</i>	1959-60..	-	2	-	485	716	25	1,228	1,230
	1960-61..	-	1	-	1,267	457	14	1,739	1,740
	1961-62..	-	-	1	690	319	106	1,116	1,118
	1962-63..	-	-	-	227	490	227	944	947
	1963-64..	-	-	-	29	49	34	112	112
	1964-65..	-	-	-	11	8	1	20	20
	1965-66..	-	-	-	-	1	-	1	1
	1966-67..	-	1	2	1	-	-	4	4
	1967-68..	-	-	-	-	-	-	-	-
	1968-69..	-	-	-	-	-	-	-	-
<i>Fin- whales.</i>	1959-60..	2	1,892	10,721	8,153	4,579	924	26,271	26,415
	1960-61..	73	2,074	10,714	7,871	5,983	584	27,299	27,374
	1961-62..	-	4,100	8,408	7,002	6,647	207	26,364	26,438
	1962-63..	-	3,477	6,099	5,639	3,228	193	18,636	18,668
	1963-64..	-	2,732	4,338	4,164	2,482	137	13,853	13,870
	1964-65..	-	2,452	2,353	1,328	1,083	90	7,306	7,308
	1965-66..	-	327	624	403	878	82	2,314	2,318
	1966-67..	-	380	690	1,329	484	2	2,885	2,893
	1967-68..	-	260	676	648	567	1	2,152	2,155
	1968-69..	-	123	1,550	838	503	-	3,014	3,020
<i>Hump- backs.</i>	1959-60..	-	-	1,257	74	1	-	1,332	1,338
	1960-61..	7	698	4	-	-	-	709	718
	1961-62..	-	1	306	-	-	2	309	309
	1962-63..	-	1	269	-	-	-	270	270
	1963-64..	-	-	-	-	-	2	2	2
	1964-65-66	-	-	-	-	-	-	-	-
	1966-67..	-	-	-	-	1	-	-	1
	1967-68..	-	-	-	-	-	-	1	-
	1968-69..	-	-	-	-	-	-	-	-
<i>Sei- whales.</i>	1959-60..	-	22	556	1,532	1,010	99	3,219	3,234
	1960-61..	-	4	602	1,901	1,583	190	4,280	4,310
	1961-62..	-	198	598	1,336	2,242	342	4,716	4,749
	1962-63..	-	392	659	1,954	2,112	365	5,482	5,503
	1963-64..	-	552	3,204	2,451	1,867	182	8,256	8,286
	1964-65..	-	1,001	7,116	7,690	3,870	161	19,838	19,874
	1965-66..	-	3,202	5,701	5,579	2,923	153	17,558	17,583
	1966-67..	-	3,168	3,615	3,673	1,880	24	12,360	12,368
	1967-68..	-	1,812	3,351	3,055	2,113	19	10,350	10,357
	1968-69..	-	2,358	1,279	1,484	649	-	5,770	5,776
<i>Sperm- whales.</i>	1959-60..	357	2,518	383	466	278	96	4,128	4,138
	1960-61..	1,013	2,018	431	448	536	208	4,654	4,666
	1961-62..	1,356	1,132	822	430	649	328	4,717	4,743
	1962-63..	1,307	1,118	778	679	393	482	4,757	4,771
	1963-64..	1,158	1,250	1,332	1,196	933	770	6,639	6,651
	1964-65..	365	739	566	1,067	895	²⁾ 570	4,202	4,211
	1965-66..	178	799	1,120	531	908	996	4,532	4,538
	1966-67..	368	658	1,155	792	861	³⁾ 1,116	4,950	4,960
	1967-68..	10	254	614	486	212	⁴⁾ 992	2,568	2,568
	1968-69..	-	225	836	344	201	⁵⁾ 1,072	2,678	2,682

¹⁾ Of which 101 caught in October ²⁾ Of which 190 caught in May. ³⁾ Of which 288 caught in May.
which 140 caught in May. ⁴⁾ of which 278 caught in May.

Table g.—Antarctic, pelagic whaling. Catch by months in percentage figures.

Species of whales. Seasons.		Nov.	Dec.	Jan.	Feb.	March.	April.	Total.	The Whal- ing Statistics' total figures.	
<i>Total animals</i>		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
.....		
.....		
<i>Blue-whales</i>		1959-60	-	-	4.5	10.9	2.2	3.4	3.4	
1960-61		-	-	-	11.0	5.3	1.4	4.5	4.5	
1961-62		-	-	-	7.3	3.2	10.8	3.0	3.0	
1962-63		-	-	-	2.7	7.9	17.9	3.1	3.1	
1963-64		-	-	-	0.3	0.9	3.0	0.4	0.4	
1964-65		-	-	-	-	0.1	0.1	-	-	
1965-66		-	-	-	-	0.1	-	-	-	
1966-67-68		-	-	-	-	-	-	-	-	
1968-69		-	-	-	-	-	-	-	-	
<i>Fin-whales</i>		1959-60	0.6	42.4	83.0	76.1	69.5	80.8	72.6	72.6
1960-61		6.7	50.5	86.1	68.5	69.9	58.6	70.6	70.5	
1961-62		-	75.5	83.0	74.0	67.4	21.0	70.8	70.8	
1962-63		-	69.7	78.1	66.3	51.9	15.2	62.0	61.9	
1963-64		-	60.3	48.9	53.1	46.6	12.2	48.0	48.0	
1964-65		-	58.5	23.5	13.2	18.5	10.9	23.3	23.3	
1965-66		-	7.5	8.4	6.2	18.6	6.7	9.5	9.5	
1966-67		-	9.0	12.6	22.9	15.0	0.2	14.3	14.3	
1967-68		-	11.2	14.6	15.5	19.6	0.1	14.3	14.3	
1968-69		-	4.5	42.3	31.4	37.2	-	26.2	26.3	
<i>Hump-backs</i>		1959-60	-	9.7	0.7	0.1	-	3.7	3.7	
1960-61		0.2	5.6	0.1	-	-	-	1.8	1.9	
1961-62		-	-	3.0	-	-	0.2	0.8	0.8	
1962-63		-	-	3.5	-	-	-	0.9	0.9	
1963-64		-	-	-	-	-	0.2	-	-	
1964-65-66		-	-	-	-	-	-	-	-	
1967-68-		-	-	-	-	-	-	-	-	
1968-69		-	-	-	-	-	-	-	-	
<i>Sei-whales</i>		1959-60	-	0.5	4.3	14.3	15.3	8.6	8.9	8.9
1960-61		-	0.1	4.8	16.5	18.5	19.1	11.1	11.1	
1961-62		-	3.6	5.9	14.1	22.8	34.7	12.7	12.7	
1962-63		-	7.9	8.4	23.0	33.9	28.8	18.2	18.3	
1963-64		-	12.2	36.1	31.3	35.0	16.2	28.6	28.6	
1964-65		-	23.9	70.9	76.2	66.1	19.6	63.3	63.3	
1965-66		-	74.0	76.6	85.7	62.0	12.4	71.9	71.9	
1966-67		-	75.3	66.2	63.4	58.3	2.1	61.2	61.2	
1967-68		-	77.9	72.2	72.9	73.1	1.9	68.7	68.7	
1968-69		-	87.2	34.9	55.7	48.0	-	50.4	50.3	
<i>Sperm-whales</i>		1959-60	99.4	57.1	3.0	4.4	4.2	8.4	11.4	11.4
1960-61		93.3	49.2	3.5	3.9	6.3	20.9	12.0	12.0	
1961-62		100.0	20.9	8.1	4.6	6.6	33.3	12.7	12.7	
1962-63		100.0	22.4	10.0	8.0	6.3	38.1	15.8	15.8	
1963-64		100.0	27.5	15.0	15.3	17.5	68.4	23.0	23.0	
1964-65		100.0	17.6	5.6	10.6	15.3	69.4	13.4	13.4	
1965-66		100.0	18.5	15.0	8.1	19.3	80.9	18.6	18.6	
1966-67		100.0	15.7	21.2	13.7	26.7	97.7	24.5	24.5	
1967-68		100.0	10.9	13.2	11.6	7.3	98.0	17.0	17.0	
1968-69		100.0	8.3	22.8	12.9	14.8	100.0	23.4	23.4	

The distribution of the various species of whales caught in the season 1968-69 was as follows:

Catch between each 10 degrees latitude in the Antarctic.

	Fin-whales		Sei-whales		Sperm-whales		Total of whales	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
40°-50° S. Lat.	979	32,5	4,178	72,4	1,275	47,6	6,432	56,1
50°-60° „ „	1,443	47,9	870	15,1	716	26,7	3,029	26,4
60°-70° „ „	592	19,6	722	12,5	687	25,7	2,001	17,5
70°-80° „ „	-	-	-	-	-	-	-	-
Total	3,014	100,0	5,770	100,0	2,678	100,0	11,462	100,0

Catch in the different areas.

For the purpose of obtaining more detailed information on the pelagic activities in the Antarctic the area round the South Pole Cap has been divided into the following 6 areas:—

Area I	between 120° West and 60° West	
„ II	60° „ „	0°
„ III	0° „ „	70° East
„ IV	70° East	130° „
„ V	130° „ „	170° West
„ VI	170° West	120° „

From the following survey will be seen the whaling results in blue-whale units in the individual areas during the last 8 seasons:

Seasons	Area I Blue-whale units	Area II Blue-whale units	Area III Blue-whale units	Area IV Blue-whale units	Area V Blue-whale units	Area VI Blue-whale units	Total blue-whale units	
	Blue-whale units	Blue-whale units	Blue-whale units	Blue-whale units	Blue-whale units	Blue-whale units	Blue-whale units	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
1961-62..	1,809	11.9	3,729	24.5	6,488	42.6	1,792	11.8
1962-63..	853	7.5	3,109	27.5	5,491	48.6	1,010	8.9
1963-64..	22	0.3	4,368	51.7	2,808	33.2	367	4.4
1964-65..	40	0.6	4,918	69.8	687	9.7	658	9.3
1965-66..	14	0.4	2,439	59.7	963	23.6	106	2.6
1966-67..	23	0.6	299	8.5	1,922	54.8	659	18.8
1967-68..	-	-	119	4.2	782	27.9	753	26.9
1968-69..	77	3.1	47	1.9	571	23.2	986	39.9

From this survey it will be seen that the catch was carried on more eastwards in the last seasons. Thus, the catch in Areas II and III (between 60° West-70° East) amounted to 25 per cent of the total catch in 1968-69 as compared with 32, 63 and 83 per cent in the three previous seasons. On the other hand the catch in Areas IV and V (between 70° East-170° West) was 63 per cent as against 47, 27 and 11 per cent in 1967-68, 1966-67 and 1965-66, respectively.

The total number of sei-whales and sperm-whales killed in the different areas during the two last seasons were as shown on top of page 17:

Areas	Sei-whales caught				Sperm-whales caught			
	Season Number	1967/68 Per cent	Season Number	1968/69 Per cent	Season Number	1967/68 Per cent	Season Number	1968/69 Per cent
Total	10,350	100.0	5,770	100.0	2,568	100.0	2,678	100.0
Of which in:								
Area I.....	-	-	73	1.2	-	-	110	4.1
,, II.....	194	1.9	188	3.2	201	7.8	56	2.1
,, III.....	2,352	22.7	1,771	30.7	489	19.1	477	17.8
,, IV.....	2,271	22.0	1,030	17.9	376	14.6	587	21.9
,, V.....	2,653	25.6	2,156	37.4	1,430	55.7	809	30.2
,, VI.....	2,880	27.8	552	9.6	72	2.8	639	23.9

Table h, below, contains a summary of the number of whales killed by species in each area during the period 1931/32–1968/69. Of a total catch of 938,537 whales during this period about 55 per cent have been fin-whales, 20 per cent blue-whales, 11 per cent sperm-whales, 10 per cent sei-whales and 3 per cent humpbacks. About 63 per cent of the total catch have been taken in Areas II and III, i.e. from 60° West eastwards to 70° East Longitude.

Table h.—Number of whales killed during the seasons 1931/32—1968/69.

— 1 —

Areas	Blue-whales		Fin-whales		Humpbacks		Sei-whales		Sperm-whales		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
I....	890	0.5	17,172	3.3	1,456	5.1	3,708	3.8	2,483	2.4	25,709	2.7
II...	38,437	20.3	160,045	30.8	1,537	5.4	40,812	41.7	21,689	20.8	262,520	28.0
III..	77,042	40.7	194,880	37.6	7,881	27.5	18,776	19.2	33,490	32.1	332,069	35.4
IV ..	56,481	29.9	79,266	15.3	12,457	43.5	10,849	11.1	21,803	20.8	180,856	19.3
V....	11,759	6.2	36,700	7.1	4,060	14.2	14,592	14.9	21,293	20.4	88,404	9.4
VI ..	4,548	2.4	30,447	5.9	1,238	4.3	9,051	9.3	3,695	3.5	48,979	5.2
Total	189,157	100.0	518,510	100.0	28,629	100.0	97,788	100.0	104,453	100.0	938,537	100.0

— 2 —

Species of whales	Area I		Area II		Area III		Area IV		Area V		Area VI		Total	
	No. of whales	Per cent												
Blue.....	890	3.5	38,437	14.6	77,042	23.2	56,481	31.2	11,759	13.3	4,548	9.3	189,157	20.2
Fin.....	17,172	66.8	160,045	61.0	194,880	58.7	79,266	43.8	36,700	41.5	30,447	62.2	518,510	55.2
Humpback	1,456	5.7	1,537	0.6	7,881	2.4	12,457	6.9	4,060	4.6	1,238	2.5	28,629	3.1
Sei	3,708	14.4	40,812	15.5	18,776	5.7	10,849	6.0	14,592	16.5	9,051	18.5	97,788	10.4
Sperm	2,483	9.6	21,689	8.3	33,490	10.0	21,803	12.1	21,293	24.1	3,695	7.5	104,453	11.1
Total.....	25,709	100.0	262,520	100.0	332,069	100.0	180,856	100.0	88,404	100.0	48,979	100.0	938,537	100.0

Table i, page 18, records the number and average size of blue-whales, fin-whales and humpbacks killed in the different areas for a series of years.

Table i.—Number and average size of whales caught

No.	Species of whales. Seasons.	Area II (60° W.-0°)			Area III (0° 70° E.)			Area IV (70° E.-130° E.)		
		Number of whales caught.	Per cent.	Average size of the whales.	Number of whales caught.	Per cent.	Average size of the whales.	Number of whales caught.	Per cent.	Average size of the whales
Blue-whales.										
1	1931/32-1939/40	1) 24,101	19.7	78.9	53,314	43.6	78.3	43,511	35.6	79.9
2	1940/41-1944/45	2,106	90.8	77.9	214	9.2	78.5	-	-	-
3	1945/46-1950/51	8,592	21.7	78.0	13,695	34.5	78.6	8,624	21.8	78.6
4	1951-52	447	8.8	78.2	1,836	36.0	79.2	1,199	23.5	77.7
5	1952-53	727	18.9	78.9	1,454	37.8	77.7	837	21.8	77.0
6	1953-54	542	20.3	78.1	1,569	58.8	78.2	356	13.4	77.2
7	1954-55	470	21.8	79.0	685	31.8	78.1	310	14.4	77.6
8	1955-56	439	27.3	77.1	300	18.6	78.8	322	20.0	77.7
9	1956-57	330	21.9	76.9	275	18.3	78.4	80	5.3	78.5
10	1957-58	236	14.0	77.8	620	36.9	77.4	186	11.1	76.7
11	1958-59	57	4.8	80.5	373	31.4	79.0	335	28.2	78.0
12	1959-60	58	4.7	79.2	231	18.8	77.4	403	32.8	73.3
13	1960-61	128	7.4	79.7	1,152	66.2	72.6	151	8.7	71.8
14	1961-62	189	16.9	77.6	477	42.8	72.9	97	8.7	74.0
15	1962-63	14	1.5	83.8	741	78.5	71.2	40	4.2	74.7
16	1963-64	-	-	-	93	83.0	70.6	19	17.0	69.7
17	1964-65	-	-	-	11	55.0	69.2	9	45.0	70.3
	1931/32-1966/67	2) 38,437	20.3	78.6	7) 77,042	40.7	78.2	7) 56,481	29.9	79.5
Fin-whales.										
1	1931/32-1939/40	3) 39,987	39.3	67.7	39,179	38.5	67.5	20,487	20.2	68.3
2	1940/41-1944/45	2,039	97.7	66.6	49	2.3	67.4	-	-	-
3	1945/46-1953/54	51,099	32.4	67.5	59,317	37.6	67.5	24,012	15.2	67.1
4	1954-55	4,963	19.4	67.3	13,607	53.1	66.4	2,790	10.9	66.4
5	1955-56	6,619	26.4	66.2	7,088	28.2	66.8	3,208	12.8	66.5
6	1956-57	10,697	41.9	67.4	3,812	15.0	67.2	291	1.1	64.6
7	1957-58	5,211	20.8	67.3	9,197	36.7	66.7	3,579	14.3	65.6
8	1958-59	4,298	16.7	67.1	9,385	36.6	66.4	7,277	28.3	66.5
9	1959-60	4,920	18.7	66.9	9,307	35.4	66.7	6,501	24.8	66.3
10	1960-61	5,223	19.1	66.6	13,269	48.6	67.5	2,086	7.7	65.7
11	1961-62	6,650	25.2	67.5	11,847	44.9	66.7	3,129	11.9	64.8
12	1962-63	5,570	29.9	67.0	8,977	48.2	65.9	1,725	9.3	65.4
13	1963-64	7,319	52.8	67.4	4,753	34.3	66.0	603	4.4	64.5
14	1964-65	4,528	62.0	65.6	1,199	16.4	65.7	766	10.5	64.6
15	1965-66	636	27.5	64.5	1,008	43.6	66.4	64	2.8	64.5
16	1966-67	81	2.8	65.6	1,554	53.9	66.4	372	12.9	67.0
17	1967-68	173	8.0	65.4	780	36.2	66.0	749	34.8	68.3
18	1968-69	32	1.1	65.1	552	18.3	67.5	1,627	54.0	66.8
	1931/32-1968/69	160,045	30.9	67.3	194,880	37.6	67.0	79,266	15.3	66.9
Humpbacks.										
1	1931/32-1940/41	4) 1,288	9.3	41.3	6,257	45.3	40.8	6,243	45.2	40.6
2	1946/47-1948/49	6	37.5	44.0	9	56.3	41.7	1	6.2	45.0
3	1949-50	172	8.2	41.0	251	11.9	41.7	779	37.0	40.4
4	1950-51	2	0.1	38.5	20	1.2	38.8	1,112	68.5	40.5
5	1951-52	33	2.2	42.9	189	12.3	42.0	1,127	73.6	39.9
6	1952-53	14	1.5	44.6	218	23.2	41.2	191	20.3	39.1
7	1953-54	13	2.2	41.2	172	29.0	41.0	258	43.5	39.3
8	1954-55	2	0.4	42.5	142	28.9	41.4	-	-	-
9	1955-56	-	-	-	64	4.5	41.1	824	57.8	39.8
10	1956-57	-	-	-	8	1.2	40.8	-	-	-
11	1957-58	-	-	-	116	29.3	41.0	-	-	-
12	1958-59	-	-	-	95	4.0	42.4	1,796	75.0	39.6
13	1959-60	-	-	-	156	11.7	41.5	66	5.0	39.6
14	1960-61	3	0.4	37.3	117	16.5	41.1	4	0.6	47.5
15	1961-62	3	1.0	42.7	33	10.7	42.1	56	18.1	39.6
16	1962-63	-	-	-	32	11.9	41.6	-	-	-
	1931/32-1966/67	6) 1,537	5.4	41.3	5) 7,881	27.5	40.9	12,457	43.5	40.3

¹⁾ Incl. 608 blue-whales, length not stated. ²⁾ Incl. 1 blue-whale caught in Area II in 1965/66. ³⁾ Incl. 193 in 1963/64. ⁴⁾ Incl. 1 humpback caught in Area II in 1965/66. ⁵⁾ Incl. 2 blue-whales caught in 1966/67.

in the different areas of Antarctic. Pelagic whaling.

Area V (130° E.-170° W.)			Area VI (170° W.-120° W.)			Area I (120° W.-60° W.)			All areas			The Whaling Statistics' total figures for whales caught.	No.
Number of whales caught.	Per cent.	Average size of the whales.	Number of whales caught.	Per cent.	Average size of the whales	Number of whales caught.	Per cent.	Average size of the whales	Number of whales caught.	Per cent.	Average size of the whales		
		Eng. ft.			Eng. ft.			Eng. ft.			Eng. ft.		
1,326	1.1	79.9	1	—	82.0	10	—	72.9	122,263	100	79.0	128,191	1
—	—	—	—	—	—	—	—	—	2,320	100	77.9	6,161	2
6,878	17.3	79.1	1,822	4.6	79.2	45	0.1	77.7	39,656	100	78.6	39,786	3
1,462	28.6	76.9	157	3.1	77.5	—	—	—	5,101	100	78.0	5,124	4
512	13.3	76.4	317	8.2	76.9	—	—	—	3,847	100	77.5	3,866	5
83	3.1	78.2	117	4.4	76.7	—	—	—	2,667	100	78.0	2,684	6
561	26.0	76.4	128	6.0	77.0	—	—	—	2,154	100	77.8	2,163	7
15	0.9	79.1	281	17.4	76.2	254	15.8	76.3	1,611	100	77.3	1,611	8
—	—	—	617	41.0	76.3	203	13.5	76.9	1,505	100	77.0	1,505	9
76	4.5	76.9	439	26.1	76.9	125	7.4	76.1	1,682	100	77.1	1,684	10
176	14.9	78.5	246	20.7	76.9	—	—	—	1,187	100	78.3	1,191	11
391	31.8	76.6	127	10.4	76.9	18	1.5	78.7	1,228	100	75.9	1,230	12
90	5.2	78.6	213	12.2	78.0	5	0.3	77.0	1,739	100	74.0	1,740	13
74	6.6	77.4	58	5.2	76.4	221	19.8	78.2	1,116	100	75.3	1,118	14
115	12.2	82.1	25	2.6	77.9	9	1.0	75.6	944	100	73.1	947	15
—	—	—	—	—	—	—	—	—	112	100	70.4	112	16
—	—	—	—	—	—	—	—	—	20	100	69.7	20	17
11,759	6.2	78.6	4,548	2.4	77.8	890	0.5	76.9	189,157	100	78.6	199,138	
1,993	2.0	68.1	—	—	—	77	—	64.7	101,723	100	67.7	108,883	1
—	—	—	—	—	—	—	—	—	2,088	100	66.6	8,289	2
13,551	8.6	67.6	9,100	5.8	67.7	560	0.4	68.2	157,639	100	67.4	159,044	3
3,021	11.8	66.0	1,227	4.8	66.4	—	—	—	25,608	100	66.5	25,878	4
1,494	5.9	66.0	2,585	10.3	66.2	4,108	16.4	67.1	25,102	100	66.5	25,289	5
23	0.1	65.0	5,064	19.9	65.9	5,615	22.0	66.8	25,502	100	66.9	25,700	6
1,130	4.5	64.4	4,107	16.4	65.1	1,843	7.3	66.1	25,067	100	66.2	25,222	7
2,625	10.2	65.6	2,102	8.2	64.6	—	—	—	25,687	100	66.3	25,837	8
4,730	18.0	66.8	401	1.5	65.1	412	1.6	64.5	26,271	100	66.6	26,415	9
3,174	11.6	66.9	3,174	11.6	64.9	373	1.4	65.2	27,299	100	66.8	27,374	10
1,098	4.2	65.5	1,120	4.2	64.9	2,520	9.6	66.0	26,364	100	66.5	26,438	11
645	3.5	66.7	346	1.8	64.8	1,373	7.3	65.7	18,636	100	66.2	18,668	12
1,144	8.3	67.5	—	—	—	34	0.2	65.9	13,853	100	66.8	13,870	13
747	10.2	65.5	—	—	—	66	0.9	62.8	7,306	100	65.5	7,308	14
385	16.6	65.7	204	8.8	67.1	17	0.7	62.3	2,314	100	65.8	2,318	15
304	10.5	66.1	530	18.4	66.2	44	1.5	62.0	2,885	100	66.3	2,893	16
223	10.4	67.1	227	10.6	66.4	—	—	—	2,152	100	66.9	2,155	17
413	13.7	65.2	260	8.6	66.3	130	4.3	66.4	3,014	100	66.6	3,020	18
36,700	7.0	66.9	30,447	5.9	66.1	17,172	3.3	66.5	518,510	100	67.1	534,601	
28	0.2	40.3	—	—	—	—	—	—	*) 13,816	100	40.7	16,225	1
—	—	—	—	—	—	—	—	—	16	100	42.8	16	2
903	42.9	40.5	—	—	—	—	—	—	2,105	100	40.6	2,117	3
162	10.0	42.0	66	4.1	41.2	262	16.1	41.5	1,624	100	40.8	1,630	4
146	9.5	41.6	37	2.4	41.7	—	—	—	1,532	100	40.4	1,546	5
505	53.6	41.3	13	1.4	45.3	—	—	—	941	100	40.9	954	6
14	2.4	42.7	136	22.9	41.2	—	—	—	593	100	40.3	594	7
171	34.8	39.8	177	35.9	41.9	—	—	—	492	100	41.1	493	8
194	13.6	39.4	329	23.1	40.3	14	1.0	43.3	1,425	100	40.0	1,432	9
—	—	—	10	1.5	42.3	655	97.3	41.4	673	100	41.4	679	10
23	5.8	41.0	167	42.2	41.8	90	22.7	41.9	396	100	41.5	396	11
502	21.0	40.7	—	—	—	—	—	—	2,393	100	40.0	2,394	12
931	69.9	40.8	—	—	—	179	13.4	41.8	1,332	100	40.9	1,338	13
293	41.3	40.9	210	29.6	41.7	82	11.6	42.5	709	100	41.4	718	14
—	—	—	92	29.8	41.1	125	40.4	42.1	309	100	41.4	309	15
188	69.6	41.6	1	0.4	41.0	49	18.1	41.6	270	100	41.6	270	16
4,060	14.2	40.8	1,238	4.3	41.3	1,456	5.1	41.7	*) 28,629	100	40.7	*) 31,114	

fin-whales, length not stated. *) Incl. 2 humpbacks, length not stated. **) Incl. 2 humpbacks caught in Area III.

Table j.—Average size of whales killed in the Antarctic, by whaling grounds and species of whales 1959/60—1968/69.

Whaling grounds and species of whales.	1959 -60	1960 -61	1961 -62	1962 -63	1963 -64	1964 -65	1965 -66	1966 -67	1967 -68	1968 -69
Pelagic whaling.	Engl. Eeet.	Engl. feet.								
<i>Blue-whales.</i>										
Males.....	74.5	72.8	73.8	72.9	69.7	66.2	—	59.8	—	—
Females.....	77.0	75.2	76.7	73.3	71.2	71.2	86.0	—	—	—
Total animals.....	75.9	74.0	75.3	73.1	70.4	69.7	86.0	59.8	—	—
<i>Fin-whales.</i>										
Males.....	65.0	65.1	64.4	64.1	64.7	63.6	64.0	64.7	65.1	65.2
Females.....	68.1	68.4	68.2	67.8	68.6	67.1	67.2	67.8	68.4	68.0
Total animals.....	66.6	66.8	66.5	66.2	66.8	65.5	65.8	66.3	66.9	66.6
<i>Humpbacks.</i>										
Males.....	39.8	40.6	40.4	39.9	—	—	43.0	—	—	—
Females.....	41.8	42.2	41.9	42.7	40.0	—	—	—	—	—
Total animals.....	40.9	41.4	41.4	41.6	40.0	—	43.0	—	—	—
<i>Sei-whales.</i>										
Males.....	48.7	48.6	48.7	48.4	48.5	48.3	47.5	47.0	47.3	47.2
Females.....	51.3	51.4	51.3	50.9	50.8	50.5	48.9	48.9	49.2	48.9
Total animals.....	50.5	50.2	50.3	49.8	49.6	49.3	48.0	47.9	48.2	48.0
<i>Sperm-whales.</i>										
Males.....	47.3	46.8	46.3	46.5	45.7	45.8	46.3	1)46.4	45.3	—
Females.....	39.0	—	41.0	38.6	38.6	38.2	37.8	1)36.4	36.8	—
Total animals.....	47.3	46.8	46.3	46.4	45.3	45.6	45.3	1)46.4	45.1	—
South Georgia.										
<i>Blue-whales, total</i>	73.0	72.8	—	—	—	—	—	—	—	—
<i>Fin-whales, total</i>	66.4	64.0	62.9	—	66.9	66.9	64.1	—	—	—
<i>Sei-whales, total</i>	49.5	49.3	48.6	—	49.8	49.8	53.0	—	—	—
<i>Sperm-whales, total</i>	47.6	46.9	46.7	—	48.7	48.4	46.4	—	—	—

¹⁾ Excl. 51 sperm-whales caught for scientific purposes. The average size of those whales was: Males 25.00 feet. Females 31.00 feet. Total animals 29.47 feet.

Average size of the whales killed.

Table j, above, gives the average size of whales killed in the pelagic whaling operations and from South Georgia in the seasons 1959/60—1968/69.

Mature and immature whales.

Table k, page 21, gives particulars of the catch of mature and immature whales in absolute and relative figures during a series of seasons.

Whales regarded as mature, see page 22.

Table l, page 22, gives a survey of the pelagic whaling results of the individual participating countries as from 1959–60 regarding the number of whales killed, oil production and number of catchers employed.

Table k.—Antarctic, pelagic whaling. Catch of immature and mature whales 1959/60—1968/69.

	1959—60.		1960—61.		1961—62.		1962—63.		1963—64.		1964—65.		1965—66.		1966—67.		1967—68.		1968—69.	
	Number of whales.	Per cent.																		
Blue-whales.																				
Immature																				
males	267	46.5	618	71.3	310	61.0	356	76.6	—	—	—	—	—	—	—	—	—	—	—	—
females	351	56.7	629	72.1	347	57.1	403	84.1	—	—	—	—	—	—	—	—	—	—	—	—
animals	618	50.3	1,247	71.7	657	58.9	759	80.4	—	—	—	—	—	—	—	—	—	—	—	—
Mature																				
males	307	53.5	249	28.7	198	39.0	109	23.4	—	—	—	—	—	—	—	—	—	—	—	—
females	303	43.3	243	27.9	261	42.9	76	15.9	—	—	—	—	1	100.0	—	—	—	—	—	—
animals	610	49.7	492	28.3	459	41.1	185	19.6	—	—	—	—	1	100.0	—	—	—	—	—	—
Fin-whales.																				
Immature																				
males	3,445	27.0	3,575	27.4	4,083	34.3	3,113	37.5	2,096	32.8	1,433	42.8	418	39.8	354	25.7	230	23.3	324	22.0
females	3,816	28.2	3,996	28.1	4,335	30.0	3,410	33.0	2,072	27.8	1,478	37.3	451	35.7	391	25.9	244	20.9	354	22.9
animals	7,261	27.6	7,571	27.7	8,418	31.9	6,523	35.0	4,168	30.1	2,911	39.8	869	37.6	745	25.8	474	22.0	678	22.5
Mature																				
males	9,290	73.0	9,494	72.6	7,816	65.7	5,187	62.5	4,303	67.2	1,915	57.2	632	60.2	1,021	74.3	757	76.7	1,147	78.0
females	9,720	71.8	10,234	71.9	10,130	70.0	6,926	67.0	5,382	72.2	2,480	62.7	813	64.3	1,119	74.1	921	79.1	1,189	77.1
animals	19,010	72.4	19,728	72.3	17,946	68.1	12,113	65.0	9,685	69.9	4,395	60.2	1,445	62.4	2,140	74.2	1,678	78.0	2,336	77.5
Humpbacks.																				
Immature																				
males	271	47.7	140	37.8	40	35.7	57	52.8	—	—	—	—	—	—	—	—	—	—	—	—
females	287	37.6	109	32.2	64	32.5	44	27.2	—	—	—	—	—	—	—	—	—	—	—	—
animals	558	41.9	249	35.1	104	33.7	101	37.4	—	—	—	—	—	—	—	—	—	—	—	—
Mature																				
males	297	52.3	230	62.2	72	64.3	51	47.2	—	—	—	—	1	100.0	—	—	—	—	—	—
females	477	62.4	230	67.8	133	67.5	118	72.8	2	100.0	—	—	—	—	—	—	—	—	—	—
animals	774	58.1	460	64.9	205	66.3	169	62.6	2	100.0	—	—	1	100.0	—	—	—	—	—	—

Table I.—Antarctic, pelagic whaling results for the various countries 1959/60—1968/69.

Seasons	All countries			Norway			United Kingdom		
	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed
1959-60	36,355	2,050,892	220	10,656	655,033	70	4,431	257,368	31
1960-61	38,810	2,123,157	252	12,490	743,298	81	3,496	196,472	22
1961-62	37,358	2,001,961	261	9,304	568,768	71	3,130	162,552	22
1962-63	30,159	1,495,779	201	4,582	224,199	32	1,552	79,222	9
1963-64	28,921	1,299,476	190	5,631	247,432	33	—	—	—
1964-65	31,413	1,017,611	172	7,470	226,357	36	—	—	—
1965-66	24,441	634,299	128	4,751	126,696	21	—	—	—
1966-67	20,225	600,666	120	3,685	104,683	21	—	—	—
1967-68	15,080	426,497	97	1,106	34,240	5	—	—	—
1968-69	11,478	385,822	84	—	—	—	—	—	—
Seasons	Japan			Netherlands			U.S.S.R.		
	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed
1959-60	12,359	Barrels 617,141	69	2,081	Barrels 143,050	13	6,828	Barrels 378,300	37
1960-61	13,592	667,350	83	2,212	139,774	14	7,020	376,263	52
1961-62	14,351	735,895	86	1,628	90,305	15	8,945	444,441	67
1962-63	13,617	716,838	79	1,301	79,515	11	9,107	396,005	70
1963-64	12,398	625,394	78	1,182	63,382	11	9,710	363,268	68
1964-65	15,465	504,023	71	—	—	—	8,478	287,231	65
1965-66	12,484	246,644	52	—	—	—	7,206	260,959	55
1966-67	9,429	192,477	44	—	—	—	7,111	303,506	55
1967-68	7,836	173,336	43	—	—	—	6,138	218,921	49
1968-69	5,316	161,931	38	—	—	—	6,162	223,891	46

^{a)} Barrel = 170 kg. (Barrel = abt. 1/6 long ton. 1 long ton = 1,016 kg.)

Whales of the following sizes are regarded as mature:

Blue-whales: Female	77 feet and over
Male	74 —,—
Fin-whales: Female	65 —,—
Male	63 —,—
Humpbacks: Female	41 —,—
Male	40 —,—

Catch results in relation to the whaling matériel and whaling period.

From the survey on next page it will be seen that there has been a great decline in the average result of blue-whale units per catcher day during the latest seasons. Thus the catch in blue-whale units per catcher day amounted to 0.68 in 1960-61 and only about 0.30 in the last four seasons.

Seasons	Area I	Average result of blue-whale units per catcher day.						All areas
		Area II	Area III	Area IV	Area V	Area VI		
1960-61 ...	0.47	0.59	0.74	0.85	0.61	0.64	0.68	
1961-62 ...	0.53	0.45	0.57	0.57	0.39	0.38	0.51	
1962-63 ...	0.36	0.51	0.59	0.36	0.46	0.42	0.50	
1963-64 ...	0.23	0.52	0.42	0.19	0.27	—	0.41	
1964-65 ...	0.54	0.47	0.38	0.29	0.25	—	0.40	
1965-66 ...	0.32	0.38	0.39	0.17	0.14	0.21	0.31	
1966-67 ...	0.56	0.28	0.37	0.29	0.15	0.25	0.30	
1967-68 ...	—	0.20	0.29	0.30	0.24	0.32	0.29	
1968-69 ...	0.27	0.16	0.23	0.43	0.29	0.23	0.30	

South Georgia.

There were no whaling operations from South Georgia during the last four seasons.

Details on the whaling results from South Georgia are given in earlier publications of the International Whaling Statistics.

Oil production by participating countries.

In table m, page 24, the total whaling results in the Antarctic during the seasons 1959/60-1968/69 have been distributed in respect to the individual participating countries. During the last 5 seasons the percentage proportion of the oil production of the individual countries has been as follows:

Countries	1964/65 Per cent	Oil production during the last 5 seasons			
		1965/66 Per cent	1966/67 Per cent	1967/68 Per cent	1968/69 Per cent
Japan	51.7	39.8	32.1	40.7	42.0
Netherlands	—	—	—	—	—
Norway	21.3	19.7	17.4	8.0	—
U.S.S.R.	27.0	40.5	50.5	51.3	58.0
Total	100.0	100.0	100.0	100.0	100.0

Oil production per blue-whale unit.

The average output of oil per blue-whale unit from and including the season 1959-60 has been recorded in table n, page 25. For the pelagic expeditions the average output was 110.2 barrels in 1968-69 against 114.9 and 109.5 barrels during the two preceding seasons.

Table m.—Antarctic whaling results for the various countries 1959/60—1968/69.

Years	All countries.		Norway		United Kingdom		Japan.		Argentina.		Netherlands.		U.S.S.R.		
	Number of whales.	Oil production.	Number of whales	Oil production.	Number of whales.	Oil production.	Number of whales.	Oil production.	Number of whales.	Oil production.	Number of whales.	Oil production.	Number of whales.	Oil production.	
1959–60.	38,688	Barrels. ¹⁾	11,324	Barrels.	5,164	Barrels.	12,359	Barrels.	932	Barrels.	2,081	Barrels.	6,828	Barrels.	
1960–61.	41,127	2,148,438	681,330	2,232,884	12,490	743,298	²⁾ 5,813	²⁾ 306,199	13,592	667,350	—	—	2,212	139,774	7,020
1961–62.	38,552	2,051,776	9,304	568,768	²⁾ 4,324	²⁾ 212,367	14,351	735,895	—	—	1,628	90,305	8,945	444,441	
1962–63.	30,159	1,495,779	4,582	224,199	1,552	79,222	13,617	716,838	—	—	1,301	79,515	9,107	396,005	
1963–64.	29,942	1,340,758	5,631	247,432	—	—	13,419	666,676	—	—	1,182	63,382	9,710	363,268	
1964–65.	32,563	1,063,416	7,470	226,357	—	—	16,615	549,828	—	—	—	—	8,478	287,231	
1965–66.	24,680	644,263	4,751	126,696	—	—	12,723	256,608	—	—	—	—	7,206	260,959	
1966–67.	20,225	600,666	3,685	104,683	—	—	9,429	192,477	—	—	—	—	7,111	303,506	
1967–68.	15,080	426,497	1,106	34,240	—	—	7,836	173,336	—	—	—	—	6,138	218,921	
1968–69.	11,478	385,822	—	—	—	—	5,316	161,931	—	—	—	—	6,162	223,891	
<i>In per cent</i>		%	%	%	%	%	%	%	%	%	%	%	%	%	
1959–60.	100.0	100.0	29.3	31.7	13.4	13.4	31.9	28.7	2.4	1.9	5.4	6.7	17.7	17.6	
1960–61.	100.0	100.0	30.4	33.3	²⁾ 14.1	²⁾ 13.7	33.0	29.9	—	—	5.4	6.3	17.1	16.8	
1961–62.	100.0	100.0	24.2	27.7	²⁾ 11.2	²⁾ 10.4	37.2	35.9	—	—	4.2	4.4	23.2	21.6	
1962–63.	100.0	10.00	15.3	15.0	5.2	5.3	44.8	47.9	—	—	4.3	5.3	30.3	26.5	
1963–64.	100.0	100.0	18.7	18.5	—	—	45.0	49.7	—	—	4.0	4.7	32.4	27.1	
1964–65.	100.0	100.0	23.0	21.3	—	—	51.0	51.7	—	—	—	—	26.0	27.0	
1965–66.	100.0	100.0	19.2	19.7	—	—	51.6	39.8	—	—	—	—	29.2	40.5	
1966–67.	100.0	100.0	18.2	17.4	—	—	46.6	32.1	—	—	—	—	35.2	50.5	
1967–68.	100.0	100.0	7.3	8.0	—	—	52.0	40.7	—	—	—	—	40.7	51.3	
1968–69.	100.0	100.0	—	—	—	—	46.3	42.0	—	—	—	—	53.7	58.0	

¹⁾ Barrel = 170 kg. (Barrel = abt. $\frac{1}{4}$ long ton. 1 long ton = 1,016 kg.) ²⁾ Including the catch and production of one British company registered at Falkland Islands, in 1960–61 1,262 whales and 58,016 barrels of oil or 3.1 and 2.6 per cent, respectively, in 1961–62 1,194 whales and 49,815 barrels of oil or 3.1 and 2.4 per cent, respectively.

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

Years.	South Georgia.	Pelagic whaling.	Years.	South Georgia.	Pelagic whaling.
	Barrels ²⁾	Barrels ²⁾		Barrels	Barrels
1959–60.....	123.0	120.5	1964–65.....	117.9	121.0
1960–61.....	127.2	116.9	1965–66.....	84.1	109.7
1961–62.....	112.9	118.1	1966–67.....	—	109.5
1962–63.....	—	114.6	1967–68.....	—	114.9
1963–64.....	112.1	122.0	1968–69.....	—	110.2

¹⁾ Other whales are reduced to blue-whale units on the following basis: — 1 blue-whale = 2 fin-whales = 2½ humpbacks = 6 sei-whales. ²⁾ Barrel = 170 kg. (Barrel = abt. 1/6 long ton. 1 long ton = 1,016 kg.)

The average output of oil per blue-whale unit per area from and including the season 1960–61 has been recorded in the survey below:

Seasons	Average oil output per blue-whale unit during the last 8 seasons						
	Area I Barrels	Area II Barrels	Area III Barrels	Area IV Barrels	Area V Barrels	Area VI Barrels	Total Barrels
1960–61 ...	108.5	140.3	112.8	101.9	115.1	110.1	116.9
1961–62 ...	125.0	136.7	111.5	95.8	114.7	120.7	118.1
1962–63 ...	114.4	131.0	106.1	105.9	122.8	103.2	114.6
1963–64 ...	—	130.3	112.8	101.4	109.9	—	122.0
1964–65 ...	134.3	123.7	110.5	103.9	114.7	—	121.0
1965–66 ...	109.7	105.5	108.7	116.7	119.2	139.9	109.7
1966–67 ...	—	102.6	103.1	126.7	116.0	114.2	109.5
1967–68 ...	—	119.9	108.8	114.3	108.7	128.7	114.9
1968–69 ...	115.4	93.6	115.4	110.4	105.5	109.6	110.2

Table o, below, is recording the average weekly production of whale-oil per blue-whale unit for the pelagic expeditions during the last two seasons.

Table o.—Average weekly production of whale-oil per blue-whale unit in the pelagic whaling 1967–68 and 1968–69.

Season 1967–68.				Season 1968–69.			
Week ending	Production of whale-oil.	Number of blue-whale units worked up.	Prod. per blue-whale unit.	Week ending	Production of whale-oil.	Number of blue-whale units worked up.	Prod. per blue-whale unit.
16/12 1967	Barrels.	Barrels.	Barrels.	14/12 1968	Barrels.	Barrels.	Barrels.
23/12 "	7,562	100.6	75.2	21/12 "	5,829	79.7	73.1
30/12 "	13,224	152.2	86.9	28/12 "	18,686	183.5	101.8
6/1 1968	18,089	165.1	109.6	4/1 1969	13,229	114.1	115.9
13/1 "	16,325	165.4	98.7	11/1 "	16,895	184.3	91.3
20/1 "	21,361	202.7	129.1	18/1 "	29,387	279.7	105.1
27/1 "	23,051	198.3	116.2	25/1 "	27,936	23 .8	117.0
3/2 "	25,843	231.4	111.7	1/2 "	24,816	219.6	113.0
10/2 "	24,091	202.0	119.3	8/2 "	18,782	166.8	112.6
17/2 "	24,020	188.8	127.2	15/2 "	15,918	134.8	118.1
24/2 "	20,953	173.6	120.7	22/2 "	18,566	161.8	114.7
2/3 "	31,146	238.0	130.9	1/3 "	20,288	164.4	123.4
9/3 "	26,243	229.8	114.2	8/3 "	24,962	213.6	116.9
16/3 "	31,505	250.6	125.7	15/3 "	14,545	133.7	108.8
23/3 "	25,753	199.5	129.1	22/3 "	12,253	108.4	113.0
30/3 "	8,729	68.7	127.1	29/3 "	5,429	48.6	111.7
7/4 "	3,229	26.6	121.4	1/4 "	4,537	36.9	123.0
	829	7.7	107.7		509	5.0	101.8
Total	321,953	2,801.0	114.9	Total	272,058	2,468.7	109.2

By-products.

In table p, below, detailed information is given on the production of by-products in the Antarctic during the seasons 1959/60–1968/69. From and including the season 1963–64 the figures are distributed in respect to the individual countries.

Table p.—Production of by-products in the Antarctic whaling in the seasons 1959/60—1968/69.

By-products Seasons Countries	Whale meat-meal, bone-meal, grax meal, guano	Whale liver or liver flakes	Liver- oil	Liver meal	Whale meat, blubber, ventral grooves	Whale solubles	Other by- products ¹⁾
1959–60 Total	Long tons 53,024	L. tons 1,316	L. tons 131	L. tons —	L. tons 95,997	L. tons 1,038	L. tons 22,651
1960–61 Total	56,031	1,937	134	—	124,698	2,169	29,718
1961–62 Total	47,696	2,336	102	—	178,670	—	39,985
1962–63 Total	35,503	1,690	87	—	163,688	—	28,692
<i>1963–64.</i>							
Norway	4,260	—	—	—	21,125	—	968
Netherlands	977	317	—	—	6,922	—	48
U.S.S.R.	18,142	2,178	—	—	14,742	—	—
Japan	8,276	197	97	—	130,947	—	26,657
Total	31,655	2,692	97	—	173,736	—	27,673
<i>1964–65.</i>							
Norway	5,374	148	—	—	7,142	—	2,452
Japan	10,090	522	12	—	147,721	—	24,211
U.S.S.R.	18,214	2,542	²⁾ —	—	16,799	—	2
Total	33,678	3,212	12	—	171,662	—	26,665
<i>1965–66.</i>							
Norway	2,559	315	—	—	13,547	—	1,242
Japan	3,561	406	—	—	107,130	—	17,102
U.S.S.R.	12,638	1,603	³⁾ —	—	15,822	—	108
Total	18,758	2,324	—	—	136,499	—	18,452
<i>1966–67.</i>							
Norway	1,329	293	—	—	21,417	—	449
Japan	1,277	299	—	—	90,968	193	14,616
U.S.S.R.	14,122	1,543	⁴⁾ —	—	16,643	—	59
Total	16,728	2,135	—	—	129,028	193	15,124
<i>1967–68.</i>							
Norway	—	—	—	—	7,630	—	—
Japan	2,020	—	—	—	79,526	2,444	10,711
U.S.S.R.	11,962	985	⁵⁾ —	—	16,826	—	128
Total	13,982	985	—	—	103,982	2,444	10,839
<i>1968–69.</i>							
Japan	1,741	—	—	—	62,089	1,378	12,182
U.S.S.R.	11,535	1,372	⁶⁾ —	—	19,419	—	152
Total	13,276	1,372	—	—	81,508	1,378	12,334

¹⁾ Products such as: Teeth, baleen, ambergris, pancreas, processed bone, bone fertilizer, protein, hypophyses, internal organs, blubber for leather, gelatin material, tail shukes, whale meat-extract etc. ²⁾ In addition 1,168,000 Mill. units of Vitamin A (Liver oil) were produced. ³⁾ In addition 865,000 Mill. units of Vitamin A (Liver oil) were produced. ⁴⁾ In addition 1,118,000 Mill. units of Vitamin A (Liver oil) were produced. ⁵⁾ In addition 885,000 Mill. units of Vitamin A (Liver oil) were produced. ⁶⁾ In addition 928,000 Mill. units of Vitamin A (Liver oil) were produced.

TABLES

Antarctic season 1968/69.

Table No. 1.—Whaling results for the various countries in the Antarctic in the season 1968/69.

Pelagic whaling.

Countries. Geographical areas.	Species of whales caught.						Oil production.	Expeditions.		
	Blue.	Fin.	Hump- back.	Sci.	Sperm.	Total of whales.		Shore sta- tions.	Floating fac- tores.	Catch- ers.
Japan:— Antarctic, pelagic	—	1,821	—	3,495	— ²⁾	5,316	161,931	—	3	38
U.S.S.R.:— Antarctic, pelagic	—	1,199	—	2,281	2,682 ³⁾	6,162	223,891	—	3	46
Total	—	3,020	—	5,776	2,682	11,478	385,822	—	6	84

¹⁾ Barrel = 170 kg. (Barrel = abt. $\frac{1}{6}$ long ton, 1 long ton = 1,016 kg.)

²⁾ In addition 42 Minke-whales were caught.

³⁾ In addition 17 Minke-whales, and 1 bottlenose were caught.

Table No. 2.—Average size of whales caught in the Antarctic in the season 1968/69.

Pelagic whaling.

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
Fin-whales.				
<i>Antarctic, pelagic whaling</i>	No. 1	66.90	69.66	68.38
Males 1,471	” 2	65.18	68.01	66.73
Females 1,543	” 3	64.58	67.87	66.05
	” 4	64.88	67.44	66.05
	” 5	64.02	66.87	65.48
	” 6	64.37	65.54	64.95
Average		65.22	67.98	66.63

Table No. 2 (continued).

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
Sei-whales.				
<i>Antarctic, pelagic whaling</i>	No. 1	47.74	50.00	48.75
Males 3,163}	" 2	47.67	49.16	48.33
Females 2,607}	Total 5,770.	" 3	47.49	48.27
	" 4	47.24	48.14	47.65
	" 5	46.47	47.85	47.13
	" 6	46.28	48.12	47.10
Average		47.24	48.85	47.97
Sperm-whales.				
<i>Antarctic, pelagic whaling</i>	No. 1	46.78	32.64	46.43
Males 2,565}	" 2	46.43	32.60	46.34
Females 113}	Total 2,678.	" 3	45.23	36.24
Average		45.92	35.64	45.48

Table No. 3.—Whales caught in the Antarctic in the season 1968/69, by species, sex and size.

Pelagic whaling.**Fin-whales.**

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
49	1	-	1	71	41	111	152
52	2	-	2	72	38	108	146
53	1	1	2	73	9	115	124
54	-	3	3	74	1	80	81
55	6	2	8	75	1	44	45
56	2	1	3	76	2	22	24
57	34	30	64	77	2	15	17
58	45	32	77	78	-	15	15
59	42	28	70	79	-	1	1
60	45	40	85	80	-	2	2
61	56	49	105	Sum		1,471	1,543
62	90	47	137				3,014
63	93	61	154				
64	117	60	177	Average size	Males:	65.22	feet
65	170	72	242		Females:	67.98	"
66	194	106	300		Total animals:	66.63	"
67	190	124	314	Per cent	Males:	48.81	
68	126	116	242		Females:	51.19	
69	106	125	231				
70	57	133	190				

Table No. 3 (continued).

Sei-whales.

Engl. feet.,	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
38	4	4	8	53	18	205	223
39	3	2	5	54	3	94	97
40	51	52	103	55	2	43	45
41	70	57	127	56	1	18	19
42	94	77	171	57	—	2	2
43	154	105	259	58	—	2	2
44	168	114	282	Sum	3,163	2,607	5,770
45	214	118	332				
46	339	137	476				
47	407	159	566	Average size	Males:	47.24 feet	
48	518	202	720		Females:	48.85 "	
49	468	232	700		Total animals:	47.97 "	
50	358	300	658				
51	193	320	513	Per cent	Males:	54.82	
52	98	364	462		Females:	45.18	

Sperm-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
30	—	2	2	49	246	—	246
31	—	4	4	50	230	—	230
32	1	4	5	51	149	—	149
33	2	13	15	52	93	—	93
34	3	17	20	53	24	—	24
35	2	21	23	54	5	—	5
36	5	8	13	55	2	—	2
37	—	4	4	Sum	2,565	113	2,678
38	39	23	62				
39	102	17	119				
40	122	—	122				
41	131	—	131	Average size	Males:	45.92 feet	
42	153	—	153		Females:	35.64 "	
43	146	—	146		Total animals:	45.48 "	
44	182	—	182	Per cent	Males:	95.78	
45	191	—	191		Females:	4.22	
46	243	—	243				
47	221	—	221				
48	273	—	273				

Table No. 4.—Whales caught in the Antarctic in the season 1968/69, by species, sex and groups of size.

Antarctic, pelagic whaling.

Fin-whales.

	Number of whales.	Per cent.
Group 1. (55 feet and less)	16	0.53
,, 2. (56 feet to and incl. 65 feet)	1,114	36.96
,, 3. (above 65 feet)	1,884	62.51
	3,014	100.00
Immature males	324	22.03
,, females	354	22.94
,, animals	678	22.50
Mature males	1,147	77.97
,, females	1,189	77.06
,, animals	2,336	77.50

Table No. 5.—Average production of whale oil per blue-whale unit in the Antarctic in the season 1968/69.

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

Geographical areas.	Expedition.	Blue-whale units. ¹⁾	Oil production.	
			Total.	Average per blue-whale unit.
<i>Antarctic, pelagic whaling</i>	No. 1	439.5	52,636	119.8
	,, 2	357.0	40,474	113.4
	,, 3	360.2	40,612	112.7
	,, 4	259.0	29,041	112.1
	,, 5	612.8	67,353	109.9
	,, 6	440.2	41,942	95.3
Total		2,468.7	272,058	110.2

¹⁾ This refers to whales worked up.

²⁾ Barrel = 170 kg. (Barrel = abt. $\frac{1}{6}$ long ton, 1 long ton = 1,016 kg.)

**Table No. 6.—Size of pregnant whale females caught in the Antarctic
in the season 1968/69.**

Antarctic, pelagic whaling.

Fin-whale females.

Length of mothers. Engl. feet.	Number of pregnant animals.	Length of mothers. Engl. feet.	Number of pregnant animals.	
58	1			Number of foetuses measured
60	1		 680
62	5	73	73	of which twin pairs
63	16	74	39 7
64	18	75	27	Total number of fin-whale fe-
65	24	76	10	males measured 1,543, of which
66	48	77	11	pregnant animals 673, or 43.62
67	67	78	9	per cent.
68	50	79	1	
69	63	80	2	
70	80			
71	65			
72	63			
		Total	673	

Sei-whale females.

Length of mothers. Engl. feet.	Number of pregnant animals.	Length of mothers. Engl. feet.	Number of pregnant animals.	
		51	200	Number of foetuses meas-
		52	236	ured 1,175
		53	136	of which twin pairs
44	3	54	61 15
45	7	55	25	» » triplets
46	24	56	13 4
47	52	58	1	Total number of sei-whale fe-
48	92			males measured 2,607, of which
49	132			pregnant animals 1,154, or 44.27
50	172			per cent.
		Total	1,154	

Table No. 7.—Whale foetuses measured in the Antarctic in the season 1968/69, by species and groups of size, in each month.

Antarctic, pelagic whaling.

Fin-whale foetuses.

Groups of size. Engl. feet.	Dec.	Jan.	Febr.	March	Total
0'— 0' 11"	—	19	1	1	21
1'— 1' 11"	3	33	2	1	39
2'— 2' 11"	—	44	11	4	59
3'— 3' 11"	4	41	10	3	58
4'— 4' 11"	3	38	26	7	74
5'— 5' 11"	5	44	14	5	68
6'— 6' 11"	—	46	9	8	63
7'— 7' 11"	—	35	21	7	63
8'— 8' 11"	1	24	13	9	47
9'— 9' 11"	—	17	30	9	56
10'—10' 11"	—	10	22	15	47
11'—11' 11"	—	11	13	4	28
12'—12' 11"	—	6	13	4	23
13'—13' 11"	—	2	4	9	15
14'—14' 11"	—	1	3	8	12
15'—15' 11"	—	1	2	1	4
16'—16' 11"	—	—	1	2	3
Total fin-whale foetuses	16	372	195	97	680
Average size of foetuses	4' 3"	5' 5"	7' 11"	9' 1"	6' 8"

Sei-whale foetuses.

Groups of size. Engl. feet.	Dec.	Jan.	Febr.	March.	Total.
0'— 0' 11"	2	1	2	—	5
1'— 1' 11"	15	2	—	—	17
2'— 2' 11"	36	5	—	—	41
3'— 3' 11"	101	21	5	—	127
4'— 4' 11"	156	36	20	3	215
5'— 5' 11"	140	56	21	3	220
6'— 6' 11"	31	43	46	1	121
7'— 7' 11"	9	51	44	6	110
8'— 8' 11"	—	22	70	9	101
9'— 9' 11"	1	10	54	21	86
10'—10' 11"	1	1	36	34	72
11'—11' 11"	—	—	11	17	28
12'—12' 11"	—	—	1	17	18
13'—13' 11"	—	—	—	12	12
14'—14' 11"	—	—	—	2	2
Total sei-whale foetuses	492	248	310	125	1 175
Average size of foetuses	4' 6"	6' 1"	8' 0"	10' 6"	6' 5"

Table No. 8.—Whale foetuses measured in the Antarctic in the season 1968/69, by species and sex, in each month.

Antarctic, pelagic whaling.

Kind of foetuses. Months.	Number of		Sex not stated.	Total foetuses.	Number of males per 100 females.
	males.	females.			
Fin-whale foetuses.					
December	8	8	—	16	100.00
January	179	186	7	372	96.24
February	92	103	—	195	89.32
March	58	38	1	97	152.63
Total	337	335	8	680	100.60
Sei-whale foetuses.					
December	236	254	2	492	92.91
January	136	112	—	248	121.43
February	166	141	3	310	117.73
March	61	64	—	125	95.31
Total	599	571	5	1,175	104.90
Sperm-whale foetuses.					
January	—	1	—	1	—
April	5	9	—	14	55.55
May	15	15	—	30	100.00
Total	20	25	—	45	80.00

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