

INTERNATIONAL  
WHALING STATISTICS

LXVI

EDITED BY  
THE COMMITTEE FOR WHALING STATISTICS



OSLO 1970

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## P R E F A C E

The present publication, International Whaling Statistics No. LXVI, embraces the results of the Antarctic whaling during the season 1969-70.

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

Oslo, December 1970.

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## INTRODUCTION

### *Regulative provisions.*

At the 21st meeting of the International Whaling Commission in London in 1969 it was decided that the pelagic catch limit for the 1969-70 Antarctic season should be 2,700 blue-whale units.

The national quota allocation for the season 1969-70 was as follows:

Japan .....	1,493	blue-whale units
U.S.S.R. ....	976	—,,—
Norway.....	231	—,,—
<hr/>		
Total .....	2,700	blue-whale units

The most important regulations governing the pelagic whaling in the Antarctic season 1969-70 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 2,700 blue-whale units in 1969-70. (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 1969–70, specified for each expedition:

Expeditions	Whaling period	Catching days
Japanese:		
Kyokuyo Maru No. 3.....	December 12th–March 13th	92
Nisshin Maru .....	December 12th–March 23rd	102
Tonan Maru No. 2 .....	December 12th–February 17th	68
U.S.S.R.:		
Juri Dolgorukij .....	December 22nd–March 31st	100
Sovietskaya Rossia .....	December 12th–March 28th	107
Sovietskaya Ukraina .....	December 12th–March 31st	110
Norway:		
Peder Huse .....	December 12th–February 27th	78
Average excl. "Peder Huse".....		<u>97</u>

The whaling period and the number of catching days permitted for the pelagic baleen whaling operations in the seasons 1961/62–1969/70 have been from December 12th to April 7th, i.e. about 117 days.

In these 9 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
1961–62 .....	115 days	1966–67.....	97 days
1962–63 .....	110 „	1967–68.....	101 „
1963–64 .....	111 „	1968–69.....	99 „
1964–65 .....	104 „	1969–70.....	97 „
1965–66 .....	103 „		

*Whaling matériel.*

In the pelagic whaling during the Antarctic season 1969–70 6 floating factories with a total of 84 catching boats and one combined floating factory/catcher "Peder Huse" of 787 gross tons were in operation.

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 1967—68		Season 1968—69		Season 1969—70	
	Floating factories	Catchers	Floating factories	Catchers	Floating factories	Catchers
Japan . . . . .	4	43	3	38	3	38
U.S.S.R. . . . .	3	49	3	46	3	46
Norway . . . . .	1	5	—	—	—	1
Total . . . . .	8	97	6	84	6	85

Table a, below, gives the number of floating factories and catchers engaged in pelagic whaling since the season 1961–62. 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 1961/62—1969/70.**

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.
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
1969–70 <sup>1)</sup> . . . . .	6	140,350	23,392	84	67,650	805	3,406

<sup>1)</sup> Excl. "Peder Huse".

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 1961–62.

Seasons	Number of floating factories	Number of catchers	Average number of catchers per floating factory
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
1969–70 <sup>1)</sup> . . . . .	6	84	14.0

<sup>1)</sup> Excl. "Peder Huse".

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 1967—68	Season 1968—69	Season 1969—70
Japan .....	10.8	12.7	12.7
U.S.S.R. ....	16.3	15.3	15.3
Norway .....	5.0	—	1.0
Average .....	12.1	14.0	14.0

*Catch results.*

During the Antarctic season 1969—70 the pelagic expeditions caught in all 11,949 whales, of which 13 were lost. Thus the number of whales actually processed was 11,936, 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 .....	3,002	2	3,000	1,501.0
Sei-whales .....	5,857	5	5,852	976.2
Total baleen whales .....	8,859	7	8,852	2,477.2
Sperm-whales .....	3,090	6	3,084	—
Total of whales .....	<sup>1)</sup> 11,949	13	11,936	2,477.2

<sup>1)</sup> In addition a total of 42 small whales were caught. <sup>2)</sup>

The pelagically caught baleen whales (excl. small whales) converted into blue-whale units amounted to 2,477.2 units in the season 1969—70. The survey below shows the total catch in blue-whale units and the agreed global quota from and including the season 1961—62:

Seasons	Catch in blue-whale units	Agreed global quota Blue-whale units
1961—62 .....	15,252.6	<sup>1)</sup> —
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
1969—70 .....	2,477.2	2,700

<sup>1)</sup> No global quota.

In the season 1969—70 the pelagic expeditions in the Antarctic processed 2,475.3 blue-whale units yielding 268,264 barrels of whale-oil, and 3,084 sperm-whales yielding 125,027 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 1966-67	Season 1967-68	Season 1968-69	Season 1969-70
Japan .....	1,639.2	1,493.0	1,493.0	1,492.9
U.S.S.R. ....	1,071.1	1,018.7	979.6	978.6
Norway .....	801.5	292.0	—	5.7
Total .....	3,511.8	2,803.7	2,472.6	2,477.2

The total whaling results in the Antarctic from 1961-62 up to and including 1969-70 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.	
1961-62	1,118	27,099	309	5,196	4,829	<sup>1)</sup> 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
1969-70	—	3,002	—	5,857	3,090	—	11,949	393,291	—	6	85	141

<sup>1)</sup> Right-whale.

**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.	
1961-62	1,118	26,438	309	4,749	4,743	<sup>1)</sup> 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
1969-70	—	3,002	—	5,857	3,090	—	11,949	393,291	—	6	85	141

<sup>1)</sup> Right-whale.

Of sperm-whales a total of 3,090 animals was in 1969-70 caught in the Antarctic (South of 40° S.). In addition the pelagic expeditions captured 2,300 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.	
1969-70 Japan .....	346	18	-	364
U.S.S.R. ....	1,389	3,066	554	5,009
Norway .....	-	6	11	17
<b>Total .....</b>	<b>1,735</b>	<b>3,090</b>	<b>565</b>	<b>5,390</b>
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
<b>Total .....</b>	<b>1,266</b>	<b>2,568</b>	<b>22</b>	<b>3,856</b>

Table d, page 13, illustrates the relation between the various species of whales killed in pelagic whaling in the Antarctic from 1961-62. During the three last seasons the fin-whale catch represented 14, 26 and 25 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 69, 50 and 49 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 1969-70 amounted to 463 barrels as against 460 and 399 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 the four last seasons was 32 to 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 1966/67-1969/70. Between 40°-50° South Lat. the catch in 1969/70 resulted in 1,667 blue-whale units, and this represents about 67 per cent of the total catch, as compared with about 48 per cent in the season 1968-69.

Catch in blue-whale units	Season 1958/59		Season 1966/67		Season 1967/68		Season 1968/69		Season 1969/70	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
40°—50° S. Lat. ....	—	—	2,029	58	1,115	40	1,186	48	1,667	67
50°—60° „ „ ....	5,299	35	543	15	1,065	38	867	35	545	22
60°—70° „ „ ....	9,194	60	894	26	621	22	417	17	263	11
70°—80° „ „ ....	741	5	41	1	—	—	—	—	—	—
Total .....	15,234	100	3,507	100	2,801	100	2,470	100	2,475	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.
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
1969-70.....	—	25.1	—	49.0	25.9	100

**Table e.—Average production per floating factory and catcher in the pelagic I. Floating factories: whaling in Antarctic 1961/62—1969/70.**

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.	Average.		
	Barrels.		Barrels.			Barrels.	Barrels.
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 <sup>1)</sup> .....	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
1969-70 .....	268,264	6	44,711	579	97	2,766	463

**II. Catchers:**

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 <sup>2)</sup> per catcher's day-work
				Total.	Average per catcher.		
	Barrels.		Barrels.			Barrels.	
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 <sup>1)</sup> ..	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
1969-70....	268,264	85	3,156	8,275	97	32	1.07

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 Whaling Statistics' total figures.	
<i>Total animals.</i>	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
1969-70..	—	2,857	3,709	2,936	1,662	772	11,936	11,949	
<i>Blue- whales.</i>	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..	—	—	—	—	—	—	—	—
1969-70..	—	—	—	—	—	—	—	—	
<i>Fin- whales.</i>	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
1969-70..	—	58	832	1,442	668	—	3,000	3,002	
<i>Hump- backs.</i>	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..	—	—	—	—	—	—	—	—
	1969-70..	—	—	—	—	—	—	—	—
<i>Sei- whales.</i>	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
1969-70..	—	2,435	2,055	792	570	—	5,852	5,857	
<i>Sperm- whales.</i>	1961-62..	1,356	1,132	822	430	649	328	4,717	4,743
	1962-63..	<sup>1)</sup> 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	<sup>2)</sup> 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	<sup>3)</sup> 1,116	4,950	4,960
	1967-68..	10	254	614	486	212	<sup>4)</sup> 992	2,568	2,568
	1968-69..	—	225	836	344	201	<sup>5)</sup> 1,072	2,678	2,682
1969-70..	—	364	822	702	424	<sup>6)</sup> 772	3,084	3,090	

<sup>1)</sup> Of which 101 caught in October. <sup>2)</sup> Of which 190 caught in May. <sup>3)</sup> Of which 288 caught in May.  
<sup>4)</sup> Of which 140 caught in May. <sup>5)</sup> Of which 278 caught in May. <sup>6)</sup> Of which 161 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 Statis- tics' total figures.
<i>Total animals</i> { 1961-62	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
.....	.	.	.	.	.	.	.	.
.....	.	.	.	.	.	.	.	.
<i>Blue-whales</i> { 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	-	-	-	-	-	-	-	-
1967-68	-	-	-	-	-	-	-	-
1968-69	-	-	-	-	-	-	-	-
1969-70	-	-	-	-	-	-	-	-
<i>Fin-whales</i> { 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
1969-70	-	2.0	22.4	49.1	40.2	-	25.1	25.1
<i>Hump-backs</i> { 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	-	-	-	-	-	-	-	-
1966-67	-	-	-	-	-	-	-	-
1967-68	-	-	-	-	-	-	-	-
1968-69	-	-	-	-	-	-	-	-
1969-70	-	-	-	-	-	-	-	-
<i>Sei-whales</i> { 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
1969-70	-	85.2	55.4	27.0	34.3	-	49.0	49.0
<i>Sperm-whales</i> { 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
1969-70	100.0	12.8	22.2	23.9	25.5	100.0	25.9	25.9



The distribution of the various species of whales caught in the season 1969-70 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.	1,630	54.3	5,112	87.4	1,936	62.8	8,678	72.7
50°-60° „ „	1,019	34.0	212	3.6	239	7.7	1,470	12.3
60°-70° „ „	351	11.7	528	9.0	909	29.5	1,788	15.0
70°-80° „ „	-	-	-	-	-	-	-	-
<b>Total . . . . .</b>	<b>3,000</b>	<b>100.0</b>	<b>5,852</b>	<b>100.0</b>	<b>3,084</b>	<b>100.0</b>	<b>11,936</b>	<b>100.0</b>

*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 9 seasons:

Seasons	Area I		Area II		Area III		Area IV		Area V		Area VI		Total blue-whale units
	Blue-whale units	Per cent	Blue-whale units	Per cent	Blue-whale units	Per cent	Blue-whale units	Per cent	Blue-whale units	Per cent	Blue-whale units	Per cent	
1961-62..	1,809	11.9	3,729	24.5	6,488	42.6	1,792	11.8	693	4.5	718	4.7	15,229
1962-63..	853	7.5	3,109	27.5	5,491	48.6	1,010	8.9	586	5.2	257	2.3	11,306
1963-64..	22	0.3	4,368	51.7	2,808	33.2	367	4.4	882	10.4	-	-	8,447
1964-65..	40	0.6	4,918	69.8	687	9.7	658	9.3	749	10.6	-	-	7,052
1965-66..	14	0.4	2,439	59.7	963	23.6	106	2.6	361	8.8	202	4.9	4,085
1966-67..	23	0.6	299	8.5	1,922	54.8	659	18.8	272	7.8	332	9.5	3,507
1967-68..	-	-	119	4.2	782	27.9	753	26.9	554	19.8	593	21.2	2,801
1968-69..	77	3.1	47	1.9	571	23.2	986	39.9	565	22.9	223	9.0	2,469
1969-70..	-	-	232	9.4	1,108	44.8	853	34.4	240	9.7	42	1.7	2,475

The catch in Areas II and III (between 60° West-70° East) amounted to 54 per cent of the total catch in 1969-70 as compared with 25, 32 and 63 per cent in the three previous seasons. On the other hand the catch in Areas IV and V (between 70° East-170° West) was 45 per cent as against 63, 47 and 27 per cent in 1968-69, 1967-68 and 1966-67, 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 1968/69 Number	Per cent	Season 1969/70 Number	Per cent	Season 1968/69 Number	Per cent	Season 1969/70 Number	Per cent
Total . . . . .	5,770	100.0	5,852	100.0	2,676	100.0	3,084	100.0
Of which in:								
Area I . . . . .	73	1.2	—	—	110	4.1	—	—
„ II . . . . .	188	3.2	1,297	22.2	56	2.1	68	2.2
„ III . . . . .	1,771	30.7	2,000	34.2	477	17.8	994	32.2
„ IV . . . . .	1,030	17.9	1,925	32.9	587	21.9	887	28.8
„ V . . . . .	2,156	37.4	474	8.1	1,283	48.0	1,085	35.2
„ VI . . . . .	552	9.6	156	2.6	163	6.1	50	1.6

Table h, below, contains a summary of the number of whales killed by species in each area during the period 1931/32–1969/70. Of a total catch of 950,473 whales during this period about 55 per cent have been fin-whales, 20 per cent blue-whales, 11 per cent sperm-whales, 11 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—1969/70.**

— 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	3.6	2,483	2.3	25,709	2.7
II . . . . .	38,437	20.3	160,077	30.7	1,537	5.4	42,109	40.7	21,757	20.2	263,917	27.8
III . . . . .	77,042	40.7	196,430	37.7	7,881	27.5	20,776	20.0	34,484	32.1	336,613	35.4
IV . . . . .	56,481	29.9	80,330	15.4	12,457	43.5	12,774	12.3	22,690	21.1	184,732	19.4
V . . . . .	11,759	6.2	37,021	7.1	4,060	14.2	15,066	14.5	22,862	21.3	90,768	9.6
VI . . . . .	4,548	2.4	30,480	5.8	1,238	4.3	9,207	8.9	3,261	3.0	48,734	5.1
Total	189,157	100.0	521,510	100.0	28,629	100.0	103,640	100.0	107,537	100.0	950,473	100.0

— 2 —

Species of whales	Area I		Area II		Area III		Area IV		Area V		Area VI		Total	
	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent	No. of whales	Per cent
Blue . . . . .	890	3.5	38,437	14.6	77,042	22.9	56,481	30.6	11,759	13.0	4,548	9.3	189,157	19.9
Fin . . . . .	17,172	66.8	160,077	60.7	196,430	58.4	80,330	43.5	37,021	40.8	30,480	62.6	521,510	54.9
Humpback	1,456	5.7	1,537	0.6	7,881	2.3	12,457	6.7	4,060	4.5	1,238	2.5	28,629	3.0
Sei . . . . .	3,708	14.4	42,109	15.9	20,776	6.2	12,774	6.9	15,066	16.6	9,207	18.9	103,640	10.9
Sperm . . . . .	2,483	9.6	21,757	8.2	34,484	10.2	22,690	12.3	22,862	25.1	3,261	6.7	107,537	11.3
Total . . . . .	25,709	100.0	263,917	100.0	336,613	100.0	184,732	100.0	90,768	100.0	48,734	100.0	950,473	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. Eng. ft.	Number of whales caught.	Per cent.	Average size of the whales. Eng. ft.	Number of whales caught.	Per cent.	Average size of the whales Eng. ft.
<b>Blue-whales.</b>										
1	1931/32-1939/40	<sup>1)</sup> 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	1945/46-1952/53	9,766	20.1	78.0	16,985	35.0	78.5	10,660	21.9	78.4
4	1953-54	542	20.3	78.1	1,569	58.8	78.2	356	13.4	77.2
5	1954-55	470	21.8	79.0	685	31.8	78.1	310	14.4	77.6
6	1955-56	439	27.3	77.1	300	18.6	78.8	322	20.0	77.7
7	1956-57	330	21.9	76.9	275	18.3	78.4	80	5.3	78.5
8	1957-58	236	14.0	77.8	620	36.9	77.4	186	11.1	76.7
9	1958-59	57	4.8	80.5	373	31.4	79.0	335	28.2	78.0
10	1959-60	58	4.7	79.2	231	18.8	77.4	403	32.8	73.3
11	1960-61	128	7.4	79.7	1,152	66.2	72.6	151	8.7	71.8
12	1961-62	189	16.9	77.6	477	42.8	72.9	97	8.7	74.0
13	1962-63	14	1.5	83.8	741	78.5	71.2	40	4.2	74.7
14	1963-64	—	—	—	93	83.0	70.6	19	17.0	69.7
15	1964-65	—	—	—	11	55.0	69.2	9	45.0	70.3
	1931/32-1969/70	<sup>2)</sup> 33,437	20.3	78.6	<sup>3)</sup> 77,042	40.7	78.2	<sup>4)</sup> 56,481	29.9	79.5
<b>Fin-whales.</b>										
1	1931/32-1939/40	<sup>5)</sup> 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
19	1969-70	32	1.1	65.8	1,550	51.6	66.4	1,064	35.5	66.3
	1931/32-1969/70	160,077	30.7	67.3	196,430	37.7	67.0	80,330	15.4	66.9
<b>Humpbacks.</b>										
1	1931/32-1940/41	<sup>6)</sup> 1,288	9.3	41.3	6,257	45.3	40.8	6,243	45.2	40.6
2	1946/47-1952/53	227	3.7	41.6	687	11.0	41.5	3,210	51.6	40.2
3	1953-54	13	2.2	41.2	172	29.0	41.0	258	43.5	39.3
4	1954-55	2	0.4	42.5	142	28.9	41.4	—	—	—
5	1955-56	—	—	—	64	4.5	41.1	824	57.8	39.8
6	1956-57	—	—	—	8	1.2	40.8	—	—	—
7	1957-58	—	—	—	116	29.3	41.0	—	—	—
8	1958-59	—	—	—	95	4.0	42.4	1,796	75.0	39.6
9	1959-60	—	—	—	156	11.7	41.5	66	5.0	39.6
10	1960-61	3	0.4	37.3	117	16.5	41.1	4	0.6	47.5
11	1961-62	3	1.0	42.7	33	10.7	42.1	56	18.1	39.6
12	1962-63	—	—	—	32	11.9	41.6	—	—	—
	1931/32-1969/70	<sup>7)</sup> 1,537	5.4	41.3	<sup>8)</sup> 7,881	27.5	40.9	12,457	43.5	40.3

<sup>1)</sup> Incl. 608 blue-whales, length not stated. <sup>2)</sup> Incl. 1 blue-whale caught in Area II in 1965/66. <sup>3)</sup> Incl. 193 in 1963/64. <sup>4)</sup> Incl. 1 humpback caught in Area II in 1965/66. <sup>5)</sup> 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
8,852	18.2	78.6	2,296	4.7	78.8	45	0.1	77.7	48,604	100	78.4	48,776	3
83	3.1	78.2	117	4.4	76.7	-	-	-	2,667	100	78.0	2,684	4
561	26.0	76.4	128	6.0	77.0	-	-	-	2,154	100	77.8	2,163	5
15	0.9	79.1	281	17.4	76.2	254	15.8	76.3	1,611	100	77.3	1,611	6
-	-	-	617	41.0	76.3	203	13.5	76.9	1,505	100	77.0	1,505	7
76	4.5	76.9	439	26.1	76.9	125	7.4	76.1	1,682	100	77.1	1,684	8
176	14.9	78.5	246	20.7	76.9	-	-	-	1,187	100	78.3	1,191	9
391	31.8	76.6	127	10.4	76.9	18	1.5	78.7	1,228	100	75.9	1,230	10
90	5.2	78.6	213	12.2	78.0	5	0.3	77.0	1,739	100	74.0	1,740	11
74	6.6	77.4	58	5.2	76.4	221	19.8	78.2	1,116	100	75.3	1,118	12
115	12.2	82.1	25	2.6	77.9	9	1.0	75.6	944	100	73.1	947	13
-	-	-	-	-	-	-	-	-	112	100	70.4	112	14
-	-	-	-	-	-	-	-	-	26	100	69.7	20	15
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
321	10.7	66.8	33	1.1	66.2	-	-	-	3,000	100	66.4	3,002	19
37,021	7.1	66.9	30,480	5.8	66.1	17,172	3.3	66.5	521,510	100	67.1	537,603	
28	0.2	40.3	-	-	-	-	-	-	13,816	100	40.7	16,225	1
1,716	27.6	41.0	116	1.9	41.8	262	4.2	41.5	6,218	100	40.7	6,263	2
14	2.4	42.7	136	22.9	41.2	-	-	-	593	100	40.3	594	3
171	34.8	39.8	177	35.9	41.9	-	-	-	492	100	41.1	493	4
194	13.6	39.4	329	23.1	40.3	14	1.0	43.3	1,425	100	40.0	1,432	5
-	-	-	10	1.5	42.3	655	97.3	41.4	673	100	41.4	679	6
23	5.8	41.0	167	42.2	41.8	90	22.7	41.9	396	100	41.5	396	7
502	21.0	40.7	-	-	-	-	-	-	2,393	100	40.0	2,394	8
931	69.9	40.8	-	-	-	179	13.4	41.8	1,332	100	40.9	1,338	9
293	41.3	40.9	210	29.6	41.7	82	11.6	42.5	709	100	41.4	718	10
-	-	-	92	29.8	41.1	125	40.4	42.1	309	100	41.4	309	11
188	69.6	41.6	1	0.4	41.0	49	18.1	41.6	270	100	41.6	270	12
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. <sup>4</sup>) Incl. 2 humpbacks, length not stated. <sup>5</sup>) Incl. 2 humpbacks caught in Area III.

**Table j.—Average size of whales killed in the Antarctic, by whaling grounds and species of whales 1961/62—1969/70.**

Whaling grounds and species of whales.	1961 -62	1962 -63	1963 -64	1964 -65	1965 -66	1966 -67	1967 -68	1968 -69	1969 -70
	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.
<b>Pelagic whaling.</b>									
<i>Blue-whales.</i>									
Males.....	73.8	72.9	69.7	66.2	—	59.8	—	—	—
Females.....	76.7	73.3	71.2	71.2	86.0	—	—	—	—
Total animals.....	75.3	73.1	70.4	69.7	86.0	59.8	—	—	—
<i>Fin-whales.</i>									
Males.....	64.4	64.1	64.7	63.6	64.0	64.7	65.1	65.2	64.7
Females.....	68.2	67.8	68.6	67.1	67.2	67.8	68.4	68.0	67.9
Total animals.....	66.5	66.2	66.8	65.5	65.8	66.3	66.9	66.6	66.4
<i>Humpbacks.</i>									
Males.....	40.4	39.9	—	—	43.0	—	—	—	—
Females.....	41.9	42.7	40.0	—	—	—	—	—	—
Total animals.....	41.4	41.6	40.0	—	43.0	—	—	—	—
<i>Sei-whales.</i>									
Males.....	48.7	48.4	48.5	48.3	47.5	47.0	47.3	47.2	47.2
Females.....	51.3	50.9	50.8	50.5	48.9	48.9	49.2	48.9	48.7
Total animals.....	50.3	49.8	49.6	49.3	48.0	47.9	48.2	48.0	47.9
<i>Sperm-whales.</i>									
Males.....	46.3	46.5	45.7	45.8	46.3	<sup>1)</sup> 46.4	45.3	45.9	45.2
Females.....	41.0	38.6	38.6	38.2	37.8	<sup>1)</sup> 36.4	36.8	35.6	37.0
Total animals.....	46.3	46.4	45.3	45.6	45.3	<sup>1)</sup> 46.4	45.1	45.5	44.9
<b>South Georgia.</b>									
<i>Blue-whales, total</i> .....	—	—	—	—	—	—	—	—	—
<i>Fin-whales, total</i> .....	62.9	—	66.9	66.9	64.1	—	—	—	—
<i>Sei-whales, total</i> .....	48.6	—	49.8	49.8	53.0	—	—	—	—
<i>Sperm-whales, total</i> .....	46.7	—	48.7	48.4	46.4	—	—	—	—

<sup>1)</sup> 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 1961/62–1969/70.

*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 1961–62 regarding the number of whales killed, oil production and number of catchers employed.

Table k.—Antarctic, pelagic whaling. Catch of immature and mature whales 1961/62—1969/70.

	1961—62.		1962—63.		1963—64.		1964—65.		1965—66.		1966—67.		1967—68.		1968—69.		1969—70.	
	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.	Number of whales.	Per cent.
<b>Blue-whales.</b>																		
Immature																		
males . . . . .	310	61.0	356	76.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
females . . . . .	347	57.1	403	84.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
animals . . . . .	657	58.9	759	80.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mature																		
males . . . . .	198	39.0	109	23.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
females . . . . .	261	42.9	76	15.9	—	—	—	—	1	100.0	—	—	—	—	—	—	—	—
animals . . . . .	459	41.1	185	19.6	—	—	—	—	1	100.0	—	—	—	—	—	—	—	—
<b>Fin-whales.</b>																		
Immature																		
males . . . . .	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	390	28.0
females . . . . .	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	425	26.5
animals . . . . .	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	815	27.2
Mature																		
males . . . . .	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	1,004	72.0
females . . . . .	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	1,181	73.5
animals . . . . .	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	2,185	72.8
<b>Humpbacks.</b>																		
Immature																		
males . . . . .	40	35.7	57	52.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
females . . . . .	64	32.5	44	27.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
animals . . . . .	104	33.7	101	37.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mature																		
males . . . . .	72	64.3	51	47.2	—	—	—	—	1	100.0	—	—	—	—	—	—	—	—
females . . . . .	133	67.5	118	72.8	2	100.0	—	—	—	—	—	—	—	—	—	—	—	—
animals . . . . .	205	66.3	169	62.6	2	100.0	—	—	1	100.0	—	—	—	—	—	—	—	—

Table I.—Antarctic, pelagic whaling results for the various countries 1961/62—1969/70.

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
		Barrels <sup>1</sup>			Barrels			Barrels	
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	—	—	—	—	—	—
1969-70	11,949	393,291	85	32	452	1	—	—	—

  

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
		Barrels			Barrels			Barrels	
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
1969-70	5,334	160,681	38	—	—	—	6,583	232,158	46

<sup>1</sup>) Barrel = 170 kg. (Barrel = abt. 1/8 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 five seasons.

Seasons	Area I	Average result of blue-whale units per catcher day.					Area VI	All areas
		Area II	Area III	Area IV	Area V			
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	
1969-70 ...	—	0.24	0.32	0.36	0.20	0.16	0.30	

*South Georgia.*

There were no whaling operations from South Georgia during the last five 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 1961/62-1969/70 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	Oil production during the last 5 seasons				
	1965/66 Per cent	1966/67 Per cent	1967/68 Per cent	1968/69 Per cent	1969/70 Per cent
Japan .....	39.8	32.1	40.7	42.0	40.9
Norway .....	19.7	17.4	8.0	—	0.1
U.S.S.R. ....	40.5	50.5	51.3	58.0	59.0
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 1961-62 has been recorded in table n, page 25. For the pelagic expeditions the average output was 108.4 barrels in 1969-70 against 110.2 and 114.9 barrels during the two preceding seasons.



Table m.—Antarctic whaling results for the various countries in the seasons 1961/62—1969/70.

Years	All countries.		Norway		United Kingdom		Japan.		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.
		Barrels. <sup>1)</sup>		Barrels.		Barrels.		Barrels.		Barrels.		Barrels.
1961-62.....	38,552	2,051,776	9,304	568,768	<sup>2)</sup> 4,324	<sup>2)</sup> 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
1969-70.....	11,949	393,291	32	452	—	—	5,334	160,681	—	—	6,583	232,158
<i>In per cent</i>	%	%	%	%	%	%	%	%	%	%	%	%
1961-62.....	100.0	100.0	24.2	27.7	<sup>2)</sup> 11.2	<sup>2)</sup> 10.4	37.2	35.9	4.2	4.4	23.2	21.6
1962-63.....	100.0	100.0	15.3	15.0	5.2	5.3	44.8	47.9	4.3	5.3	30.3	26.5
1963-64.....	100.0	10.00	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
1969-70.....	100.0	100.0	0.3	0.1	—	—	44.6	40.9	—	—	55.1	59.0

<sup>1)</sup> Barrel = 170 kg. (Barrel = abt.  $\frac{1}{4}$  long ton. 1 long ton = 1,016 kg.) <sup>2)</sup> 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 2.3 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.<sup>1)</sup>

Years.	South Georgia.	Pelagic whaling.	Years.	South Georgia.	Pelagic whaling.
	Barrels <sup>2)</sup>	Barrels <sup>2)</sup>		Barrels	Barrels
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
1964-65.....	117.9	121.0	1969-70.....	—	108.4
1965-66.....	84.1	109.7			

<sup>1)</sup> Other whales are reduced to blue-whale units on the following basis: — 1 blue-whale = 2 fin-whales = 2½ humpbacks = 6 sei-whales. <sup>2)</sup> 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 1961-62 has been recorded in the survey below:

Seasons	Average oil output per blue-whale unit during the last 9 seasons						
	Area I Barrels	Area II Barrels	Area III Barrels	Area IV Barrels	Area V Barrels	Area VI Barrels	Total Barrels
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
1969-70 ...	—	100.7	105.7	107.4	125.9	142.1	108.4

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 1968-69 and 1969-70.

Season 1968-69.				Season 1969-70.			
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.
	Barrels.		Barrels.		Barrels.		Barrels.
14/12 1968	5,829	79.7	73.1	13/12 1969	3,612	42.3	85.4
21/12 "	18,686	183.5	101.8	20/12 "	15,740	157.4	100.0
28/12 "	13,229	114.1	115.9	27/12 "	14,895	145.9	102.1
4/1 1969	16,895	184.3	91.3	3/1 1970	14,790	142.7	103.6
11/1 "	29,387	279.7	105.1	10/1 "	19,857	181.9	109.2
18/1 "	27,936	238.8	117.0	17/1 "	23,267	206.0	112.9
25/1 "	24,816	219.6	113.0	24/1 "	14,198	131.9	107.6
1/2 "	18,782	166.8	112.6	31/1 "	17,452	185.5	94.1
8/2 "	15,918	134.8	118.1	7/2 "	25,347	237.7	106.6
15/2 "	18,566	161.8	114.7	14/2 "	27,229	247.2	110.1
22/2 "	20,288	164.4	123.4	21/2 "	19,162	181.4	105.6
1/3 "	24,962	213.6	116.9	28/2 "	21,525	186.1	115.7
8/3 "	14,545	133.7	108.8	7/3 "	17,354	138.7	125.1
15/3 "	12,253	108.4	113.0	14/3 "	13,154	114.1	115.3
22/3 "	5,429	48.6	111.7	21/3 "	10,763	102.6	104.9
30/3 "	4,537	36.9	123.0	28/3 "	9,196	68.6	134.1
1/4 "	509	5.0	101.8	4/4 "	723	5.3	136.4
<b>Total</b>	<b>272,058</b>	<b>2,473.7</b>	<b>109.2</b>	<b>Total</b>	<b>268,264</b>	<b>2,475.3</b>	<b>108.4</b>

*By-products.*

In table p, below, detailed information is given on the production of by-products in the Antarctic during the seasons 1961/62–1969/70. From and including the season 1964–65 the figures are distributed in respect to the individual countries.

**Table p.—Production of by-products in the Antarctic whaling in the seasons 1961/62–1969/70.**

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 <sup>1</sup>
	Long tons	L. tons	L. tons	L. tons	L. tons	L. tons	L. tons
1961–62 . . . . . Total	47,696	2,336	102	–	178,670	–	39,985
1962–63 . . . . . Total	35,503	1,690	87	–	163,688	–	28,692
1963–64 . . . . . 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	<sup>2)</sup> –	–	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	<sup>3)</sup> –	–	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	<sup>4)</sup> –	–	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	<sup>5)</sup> –	–	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	<sup>6)</sup> –	–	19,419	–	152
Total	13,276	1,372	–	–	81,508	1,378	12,334
<i>1969–70.</i>							
Japan . . . . .	1,052	50	–	–	63,547	1,968	13,711
Norway . . . . .	–	4	–	–	309	–	–
U.S.S.R. . . . .	12,693	1,572	<sup>7)</sup> –	–	21,656	–	141
Total	13,745	1,626	–	–	85,512	1,968	13,852

<sup>1)</sup> Products such as: Teeth, baleen, ambergris, pancreas, processed bone, bone fertilizer, protein, hypophyses, internal organs, blubber for leather, gelatin material, tail flukes, whale meat-extract etc. <sup>2)</sup> In addition 1,168,000 Mill. units of Vitamin A (Liver oil) were produced. <sup>3)</sup> In addition 865,000 Mill. units of Vitamin A (Liver oil) were produced. <sup>4)</sup> In addition 1,118,000 Mill. units of Vitamin A (Liver oil) were produced. <sup>5)</sup> In addition 885,000 Mill. units of Vitamin A (Liver oil) were produced. <sup>6)</sup> In addition 928,000 Mill units of Vitamin A (Liver oil) were produced. <sup>7)</sup> In addition 1,129,000 Mill. units of Vitamin A were produced.

## TABLES

## Antarctic season 1969/70.

Table No. 1.—Whaling results for the various countries in the Antarctic in the season 1969/70.

## Pelagic whaling.

Countries. Geographical areas.	Species of whales caught.						Oil production.	Expeditions.		
	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Total of whales.		Shore sta- tions.	Floa- ting fac- tories.	Catch- ers.
Japan:—							Barrels <sup>1)</sup>			
Antarctic, pelagic	—	1,821	—	3,495	18	5,334	160,681	—	3	38
U.S.S.R.:—										
Antarctic, pelagic	—	1,177	—	2,340	3,066 <sup>2)</sup>	6,583	232,158	—	3	46
Norway:—										
Antarctic, pelagic	—	4	—	22	6 <sup>3)</sup>	32	452	—	—	1
Total	—	3,002	—	5,857	3,090	11,949	393,291	—	6	85

<sup>1)</sup> Barrel = 170 kg. (Barrel = abt.  $\frac{1}{8}$  long ton, 1 long ton = 1,016 kg.)

<sup>2)</sup> In addition 39 small whales were caught.

<sup>3)</sup> In addition 1 Minke-whale and 2 killer-whales were caught.

Table No. 2.—Average size of whales caught in the Antarctic in the season 1969/70.

## Pelagic whaling.

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
<b>Fin-whales.</b>				
<i>Antarctic, pelagic whaling</i> . . . . .	No. 1	65.39	68.66	67.16
Males 1,394 } Total 3,000.	" 2	64.83	68.81	67.00
Females 1,606 }	" 3	64.65	67.98	66.58
	" 4	65.00	67.63	66.29
	" 5	63.50	69.00	66.25
	" 6	64.49	67.34	65.89
	" 7	63.97	66.31	65.17
Average		64.69	67.89	66.40

Table No. 2 (continued).

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
<b>Sei-whales.</b>				
<i>Antarctic, pelagic whaling</i> . . . . .	No. 1	Engl. feet. 48,05	Engl. feet. 49.97	Engl. feet. 48.98
Males 3,127 } Total 5,852.	" 2	45.75	50.14	48.55
Females 2,725 }	" 3	47.96	49.11	48.48
	" 4	47.41	48.95	48.14
	" 5	46.83	48.69	47.72
	" 6	46.80	48.57	47.57
	" 7	47.01	47.94	47.45
Average		47.23	48.74	47.93

Table No. 3.—Whales caught in the Antarctic in the season 1969/70, 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.	
52	1	—	1	72	16	144	160
53	1	1	2	73	12	120	132
54	6	1	7	74	3	58	61
55	3	3	6	75	1	59	60
56	2	1	3	76	—	36	36
57	71	55	126	77	—	25	25
58	33	32	65	78	—	9	9
59	46	36	82	79	—	5	5
60	50	56	106	80	—	1	1
61	91	49	140	81	—	1	1
62	86	62	148				
63	104	56	160	Sum	1,394	1,606	3,000
64	111	73	184				
65	145	71	216				
66	153	76	229	Average size	{	Males: 64.7 feet	
67	142	109	251			Females: 67.9 "	
68	120	100	220			Total animals: 66.4 "	
69	88	116	204	Per cent	{	Males: 46.5	
70	74	125	199			Females: 53.5	
71	35	126	161				

Table No. 3 (continued).

## Sei-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
35	1	—	1	51	152	293	445
36	—	1	1	52	96	386	482
37	1	1	2	53	14	163	177
38	2	1	3	54	4	83	87
39	3	5	8	55	—	43	43
40	46	35	81	56	—	18	18
41	62	55	117	57	—	2	2
42	105	69	174	58	—	1	1
43	128	115	243	Sum	3,127	2,725	5,852
44	154	127	281	Average size			Males: 47.2 feet
45	207	128	335	Per cent			Females: 48.7 "
46	331	167	498				Total animals: 47.9 "
47	437	177	614				Males: 53.4
48	558	239	797				Females: 46.6
49	511	297	808				
50	315	319	634				

## Sperm-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
29	1	—	1	48	257	—	257
31	—	1	1	49	261	—	261
33	2	5	7	50	185	—	185
34	1	10	11	51	166	—	166
35	6	14	20	52	85	—	85
36	4	7	11	53	16	—	16
37	4	3	7	54	12	—	12
38	92	35	127	56	1	—	1
39	169	20	189	Sum	2,985	99	3,084
40	164	4	168	Average size			Males: 45.2 feet
41	198	—	198	Per cent			Females: 37.0 "
42	197	—	197				Total animals: 44.9 "
43	243	—	243				Males: 96.8
44	248	—	248				Females: 3.2
45	194	—	194				
46	227	—	227				
47	252	—	252				

**Table No. 4.—Whales caught in the Antarctic in the season 1969/70,  
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) .....	1,230	41.00
„ 3. (above 65 feet) .....	1,754	58.47
	3,000	100.00
Immature males .....	390	27.98
„ females .....	425	26.46
„ animals .....	815	27.17
Mature males .....	1,004	72.02
„ females .....	1,181	73.54
„ animals .....	2,185	72.83

**Table No. 5.—Average production of whale oil per blue-whale unit in  
the Antarctic in the season 1969/70.**

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. <sup>1)</sup>	Oil production.	
			Total.	Average per blue-whale unit.
			Barrels <sup>2)</sup>	Barrels <sup>2)</sup>
<i>Antarctic, pelagic whaling</i> .....	No. 1	439.0	48,882	113.4
	„ 2	254.5	28,788	113.1
	„ 3	361.0	40,294	111.6
	„ 4	614.9	66,471	108.1
	„ 5	361.2	38,935	107.8
	„ 6	439.0	44,594	101.6
	„ 7	5.7	300	52.6
Total		2,475.3	268,264	108.4

<sup>1)</sup> This refers to whales worked up.

<sup>2)</sup> Barrel = 170 kg. (Barrel = abt.  $\frac{1}{4}$  long ton, 1 long ton = 1,016 kg.)

**Table No. 6.—Size of pregnant whale females caught in the Antarctic in the season 1969/70.**

Antarctic, pelagic whaling.

**Fin-whale females.**

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		
59	1	71	73	
60	2	72	90	
61	3	73	75	
62	6	74	36	Number of foetuses measured . . . . . 699
63	12	75	37	of which twin pairs . . . . . 8
64	17	76	19	Sex and length not stated. 16
65	22	77	11	
66	31	78	3	
67	65	79	3	
68	55			
69	72			
70	74	Total	707	

**Sei-whale females.**

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		
41	1	52	251	
44	6	53	113	Number of foetuses measured . . . . . 1,312
45	18	54	63	of which twin pairs . . . . . 12
46	47	55	26	Size not stated . . . . . 10
47	62	56	15	
48	138	57	1	
49	178			
50	196	Total	1,310	
51	195			

**Sperm-whale females.**

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		
31	6	38	28	
32	6	39	17	
33	19	40	6	
34	15	42	1	
35	13	43	1	
36	12	Total	137	
37	13			



**Table No. 7.—Whale fetuses measured in the Antarctic in the season 1969/70, by species and groups of size, in each month.**

Antarctic, pelagic whaling.

Fin-whale fetuses.

Groups of size. Engl. feet.	Dec.	Jan.	Febr.	March	Total
0'—0' 11" .....	—	2	1	—	3
1'—1' 11" .....	2	8	8	—	18
2'—2' 11" .....	2	12	27	5	46
3'—3' 11" .....	2	20	27	4	53
4'—4' 11" .....	4	22	25	12	63
5'—5' 11" .....	1	23	48	12	84
6'—6' 11" .....	—	21	28	15	64
7'—7' 11" .....	—	20	27	6	53
8'—8' 11" .....	—	17	51	14	82
9'—9' 11" .....	—	13	40	13	66
10'—10' 11" .....	—	7	27	21	55
11'—11' 11" .....	—	4	19	9	32
12'—12' 11" .....	—	—	16	12	28
13'—13' 11" .....	—	—	12	11	23
14'—14' 11" .....	—	—	7	3	10
15'—15' 11" .....	—	—	7	2	9
16'—16' 11" .....	—	—	—	5	5
17'—17' 11" .....	—	—	2	2	4
18'—18' 11" .....	—	—	—	1	1
<b>Total fin-whale fetuses</b> .....	<b>11</b>	<b>169</b>	<b>372</b>	<b>147</b>	<b>699</b>
<b>Average size of fetuses</b> .....	<b>3' 5"</b>	<b>6' 0"</b>	<b>7' 8"</b>	<b>9' 3"</b>	<b>7' 6"</b>

Sex and size not stated 16.

Sei-whale fetuses.

Groups of size. Engl. feet.	Dec.	Jan.	Febr.	March.	Total.
0'—0' 11" .....	2	1	—	—	3
1'—1' 11" .....	26	7	—	—	33
2'—2' 11" .....	57	18	—	—	75
3'—3' 11" .....	94	34	6	—	134
4'—4' 11" .....	147	54	14	1	216
5'—5' 11" .....	152	110	12	3	277
6'—6' 11" .....	60	110	21	6	197
7'—7' 11" .....	18	75	19	12	124
8'—8' 11" .....	2	29	28	15	74
9'—9' 11" .....	2	6	41	32	81
10'—10' 11" .....	—	1	18	37	56
11'—11' 11" .....	—	—	10	16	26
12'—12' 11" .....	—	—	3	12	15
13'—13' 11" .....	—	—	1	—	1
<b>Total sei-whale fetuses</b> .....	<b>560</b>	<b>445</b>	<b>173</b>	<b>134</b>	<b>1,312</b>
<b>Average size of fetuses</b> .....	<b>4' 7"</b>	<b>5' 10"</b>	<b>8' 1"</b>	<b>9' 4"</b>	<b>6' 0"</b>

Table No. 7 (continued).

## Sperm-whale foetuses.

Groups of size. Engl. feet.	Nov.	Dec.	Jan.	Febr.	March	April	May	Total
0'—0' 11" .....	2	2	—	—	—	2	—	6
1'—1' 11" .....	—	1	—	—	—	6	—	7
2'—2' 11" .....	—	1	—	—	—	13	2	16
3'—3' 11" .....	—	—	—	—	—	13	5	18
4'—4' 11" .....	1	—	—	—	—	4	1	6
5'—5' 11" .....	—	—	—	—	—	—	1	1
6'—6' 11" .....	2	—	—	—	—	—	—	2
7'—7' 11" .....	4	—	—	—	—	—	—	4
8'—8' 11" .....	8	—	—	—	—	—	—	8
9'—9' 11" .....	11	—	—	—	—	1	—	12
10'—10' 11" .....	15	3	—	—	—	—	—	18
11'—11' 11" .....	8	2	—	—	—	—	—	10
12'—12' 11" .....	5	—	1	—	—	5	—	11
13'—13' 11" .....	1	—	1	—	—	2	—	4
16'—16' 11" .....	—	—	—	—	—	1	—	1
Total sperm-whale foetuses ....	57	9	2	—	—	47	9	124
Average size of foetuses .....	9' 6"	6' 10"	13' 0"	—	—	5' 2"	3' 6"	7' 4"

Table No. 8.—Whale foetuses measured in the Antarctic in the season 1969/70, 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.			
<b>Fin-whale foetuses.</b>					
December .....	6	5	—	11	120.00
January .....	99	70	—	169	141.43
February .....	181	191	1	373	94.76
March .....	80	67	—	147	119.40
Total	366	333	1	700	109.91
<b>Sei-whale foetuses.</b>					
December .....	275	285	—	560	96.49
January .....	210	235	—	445	89.36
February .....	92	81	—	173	113.58
March .....	68	66	—	134	103.03
Total	645	667	—	1,312	96.70
<b>Sperm-whale foetuses.</b>					
November .....	32	25	2	59	128.00
December .....	6	3	—	9	200.00
January .....	—	2	—	2	—
February .....	—	—	—	—	—
March .....	—	—	—	—	—
April .....	23	24	—	47	95.83
May .....	5	4	—	9	125.00
Total	66	58	2	126	113.80

