

DET NORSKE HVALRÅDS STATISTISKE PUBLIKASJONER

INTERNATIONAL  
WHALING STATISTICS  
LX

EDITED BY  
THE COMMITTEE FOR WHALING STATISTICS



OSLO 1968

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## **P R E F A C E**

The present publication, International Whaling Statistics No. LX, embraces the results of the Antarctic whaling during the season 1966–67.

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

Oslo, December 1967.

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*Einar Vangstein.*



## INTRODUCTION

### *Regulative provisions.*

At the seventeenth meeting of the International Whaling Commission a resolution was adopted reducing the quota for the Antarctic season 1965–66 to 4,500 blue-whale units. It was also agreed that further reductions would be made for the seasons 1966–67 and 1967–68, that would ensure that the total catch for 1967–68 would be less than the combined sustainable yields of the fin- and sei-whale stocks as determined on the basis of scientific evidence. During the eighteenth meeting the quota for 1966–67 was discussed in the light of this resolution and the latest stock assessment. It was unanimously agreed by the Commission that in the 1966–67 season the Antarctic pelagic catch should not exceed 3,500 blue-whale units, and that the total catch for 1967–68 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 1966–67 was as follows:

Japan .....	1,633	blue-whale units
U.S.S.R. ....	1,067	—»—
Norway .....	800	—»—
<hr/>		
Total .....	3,500	blue-whale units

The most important regulations governing the pelagic whaling in the Antarctic season 1966–67 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 3,500 blue-whale units in 1966–67. (As one blue-whale unit is reckoned 2 fin-whales or 6 sei-whales.)

*Whaling period.*

All the pelagic expeditions commenced the taking of fin- and sei-whales on December 12th 1966, and their factory ships ceased the operations gradually as the stipulated quotas were reached.

The whaling period and number of catching days for the pelagic baleen whaling operations in the seasons 1959/60–1966/67 will be seen from the following survey:

Seasons	Whaling period	Catching days
1959–60.....	December 28th–April 7th	102
1960–61.....	December 28th–April 7th	101
1961–62.....	December 12th–April 7th	117
1962–63.....	December 12th–April 7th	117
1963–64.....	December 12th–April 7th	118
1964–65.....	December 12th–April 7th	117
1965–66.....	December 12th–April 7th	117
1966–67.....	December 12th–April 7th	117

In these eight seasons some of the the expeditions closed their baleen whale operations at an earlier date. The average catching periods were therefore:

Seasons	Average catching period
1959–60 .....	99 days
1960–61 .....	95 »
1961–62 .....	115 »
1962–63 .....	110 »
1963–64 .....	111 »
1964–65 .....	104 »
1965–66 .....	103 »
1966–67 .....	97 »

*Whaling matériel.*

In the pelagic whaling during the Antarctic season 1966–67 9 floating factories with a total of 120 catching boats were in operation. This was one floating factory less than in the previous season, as the Japanese factory ship «Tonan Maru» was not taking part this season.

The distribution of pelagic expeditions between the different countries in the season 1966–67, compared with the two previous seasons, was as follows:

Countries	Season 1964–65		Season 1965–66		Season 1966–67	
	Floating factories	Catchers	Floating factories	Catchers	Floating factories	Catchers
Japan .....	7	71	5	52	4	44
U. S. S. R. .....	4	65	3	55	3	55
Norway .....	4	36	2	21	2	21
Total	15	172	10	128	9	120

**Table a.—Number and gross tonnage of floating factories and catchers engaged in pelagic whaling in the Antarctic 1948/49—1966/67.**

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.
1948–49....	18	254,406	14,134	191	76,272	399	1,501
1949–50....	18	257,112	14,284	216	91,499	424	1,582
1950–51....	19	271,646	14,297	239	108,493	454	1,705
1951–52 <sup>1)</sup> ..	19	289,120	15,217	263	124,374	473	1,774
1952–53....	16	238,448	14,903	230	113,608	494	1,862
1953–54....	17	261,898	15,406	206	102,525	498	1,874
1954–55....	19	286,205	15,063	233	119,011	511	1,933
1955–56....	19	305,765	16,093	257	131,881	513	1,945
1956–57....	20	320,268	16,013	225	122,569	545	2,073
1957–58....	20	321,656	16,083	237	135,024	570	2,190
1958–59....	20	329,136	16,457	235	140,755	599	2,390
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

<sup>1)</sup> Excl. fl.f. "Balkal Maru" with 5 catchers. Catch of sperm-whales only.

Table a, above, gives the number of floating factories and catchers engaged in pelagic whaling since the season 1948–49. The table also shows the average gross tonnage of the floating factories and the average tonnage and engine power of the catchers.

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 1948–49.

Seasons	Number of floating factories	Number of catchers	Average number of catchers per floating factory	Seasons	Number of floating factories	Number of catchers	Average number of catchers per floating factory
1948–49	18	191	10.6	1958–59	20	235	11.8
1949–50	18	216	12.0	1959–60	20	220	11.0
1950–51	19	239	12.6	1960–61	21	252	12.0
1951–52	19	263	13.8	1961–62	21	261	12.4
1952–53	16	230	14.4	1962–63	17	201	11.8
1953–54	17	206	12.1	1963–64	16	190	11.9
1954–55	19	233	12.3	1964–65	15	172	11.5
1955–56	19	257	13.5	1965–66	10	128	12.8
1956–57	20	225	11.3	1966–67	9	120	13.3
1957–58	20	237	11.9				

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 1964-65	Season 1965-66	Season 1966-67
Japan .....	10.1	10.4	11.0
U.S.S.R. .....	16.3	18.3	18.3
Norway .....	9.0	10.5	10.5
Average .....	11.5	12.8	13.3

#### *Catch results.*

During the Antarctic season 1966-67 the pelagic expeditions caught in all 20,225 whales, of which 22 were lost. Thus the number of whales actually processed was 20,203, as will be seen from the following survey:

Species of whales	Whales captured	Lost whales	Processed whales	Captured whales in blue-whale units
Blue-whales .....	4	—	4	4.0
Fin-whales .....	2,893	4	2,889	1,446.5
Sei-whales .....	12,368	8	12,360	2,061.3
Total baleen whales .....	15,265	12	15,253	3,511.8
Sperm-whales .....	4,960	10	4,950	—
Total of whales .....	20,225	22	20,203	3,511.8

In addition the pelagic expeditions captured in all 1,334 sperm-whales in the South Atlantic Ocean, Indian Ocean and South Pacific Ocean (North of 40° South Lat.). Of these whales were produced 39,577 barrels sperm-oil. These whales and the oil production will be included in the statistics pertaining to catch on grounds outside the Antarctic.

The pelagically caught baleen whales converted into blue-whale units amounted to 3,511.8 units in the season 1966-67. 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	<sup>1)</sup> —
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

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

**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 sta- tions.	Floating fac- to- ries.	Catch- ers.	
1948-49	7,625	19,123	31	578	4,078	-	31,435	Barrels. 2,219,621	3	18	212	148
1949-50	6,182	20,060	2,143	1,284	2,727	-	32,396	2,166,489	3	18	237	137
1950-51	7,048	19,456	1,638	886	4,968	-	33,996	2,303,690	3	19	260	131
1951-52	5,130	22,527	1,556	530	5,485	-	35,228	2,479,180	3	20	289	122
1952-53	3,870	22,867	963	621	2,332	-	30,653	2,118,097	3	16	251	122
1953-54	2,697	27,659	605	1,029	2,879	-	34,869	2,285,720	3	17	227	154
1954-55	2,176	28,624	495	569	5,790	-	37,654	2,242,555	3	19	254	148
1955-56	1,614	27,958	1,432	560	6,974	-	38,538	2,307,171	3	19	278	139
1956-57	1,512	27,757	679	1,692	4,429	-	36,069	2,246,922	3	20	246	147
1957-58	1,690	27,473	396	3,309	6,535	-	39,403	2,317,638	2	20	257	153
1958-59	1,192	27,128	2,394	2,421	5,652	-	38,787	2,152,659	3	20	256	152
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 <sup>1)</sup>	2	41,127	2,232,884	3	21	268	153
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

<sup>1)</sup> 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 sta- tions.	Floating fac- to- ries.	Catch- ers.	
1948-49	7,399	17,201	13	16	3,865	-	28,494	Barrels. 2,047,427	-	18	191	179
1949-50	6,168	18,061	2,117	101	2,570	-	29,017	2,019,368	-	18	216	134
1950-51	6,966	17,474	1,630	367	4,742	-	31,179	2,152,498	-	19	239	130
1951-52	5,124	20,520	1,546	32	5,344	-	32,566	2,334,805	-	20	268	122
1952-53	3,866	21,197	954	123	2,185	-	28,325	1,998,094	-	16	230	123
1953-54	2,684	24,986	594	251	2,700	-	31,215	2,100,884	-	17	206	152
1954-55	2,163	25,878	493	146	5,708	-	34,388	2,061,789	-	19	233	148
1955-56	1,611	25,289	1,432	276	6,881	-	35,489	2,134,808	-	19	257	138
1956-57	1,505	25,700	679	712	4,345	-	32,941	2,098,854	-	20	225	146
1957-58	1,684	25,222	396	2,385	6,310	-	35,997	2,146,206	-	20	237	152
1958-59	1,191	25,837	2,394	1,402	5,437	-	36,261	2,050,241	-	20	235	154
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 <sup>1)</sup>	2	38,810	2,123,157	-	21	252	154
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

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

In the season 1966-67 the pelagic expeditions in the Antarctic processed 3,508.6 blue-whale units yielding 383,888 barrels of whale-oil, and 4,950 sperm-whales yielding 216,778 barrels of sperm-oil.

The pelagic catch in blue-whale units in the last three seasons apportioned between the individual countries was as shown next page:

Countries	Season 1964-65	Catch in blue-whale units		Season 1966-67
		Season 1965-66		
Japan .....	4,124.6	2,340.1		1,639.2
U.S.S.R. .....	1,588.1	921.6		1,071.1
Norway .....	1,273.4	829.2		801.5
Total .....	6,986.1	4,090.9		3,511.8

The total whaling results in the Antarctic from 1948-49 up to and including 1966-67 are given in table b, page 11. In table c, page 11, the pelagic results during the same period have been recorded separately.

From table c it will appear that the catch of sei-whales in 1966-67 decreased to 12,368 animals from 17,583 in the previous season. On the other hand the fin-whale catch showed some increase to 2,893 from 2,318 in the previous season.

Of sperm-whales a total of 4,960 animals was in 1966-67 caught in the Antarctic (South of 40° S.). In addition the pelagic expeditions captured 1,334 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 each of the last 4 seasons:

Seasons Countries	Number of sperm-whales caught in the pelagic whaling			
	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.	Total
<b>1966-67</b>				
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
<b>1965-66</b>				
Japan .....	160	264	58	482
U.S.S.R. .....	704	3,622	628	4,954
Norway .....	16	652	—	668
Total ....	880	4,538	686	6,104
<b>1964-65</b>				
Japan .....	2,792	279	—	3,071
U.S.S.R. .....	1,052	2,701	1,334	5,087
Norway .....	412	1,231	5	1,648
Total ....	4,256	4,211	1,339	9,806
<b>1963-64</b>				
Japan .....	2,804	1,877	25	4,706
U.S.S.R. .....	477	3,522	35	4,034
Norway .....	269	917	—	1,186
Netherlands .....	—	335	—	335
Total ....	3,550	6,651	60	10,261

Table d, page 14, illustrates the relation between the various species of whales killed in pelagic whaling in the Antarctic from 1948–49. During the two last seasons 1966–67 and 1965–66 the fin-whale catch represented 14 and 10 per cent of the total catch compared with 23, 48 and 62 per cent during the three preceding seasons. On the other hand the sei-whale catch increased from about 29 per cent in 1963–64 to 63 per cent in 1964–65 and to 72 per cent in 1965–66. In 1966–67 the sei-whale catch amounted to 61 per cent of the total catch. The catch of sperm-whales in the Antarctic (i.e. south of 40° South Latitude) amounted to about 24 per cent last season as against 19 and 13 per cent in the two preceding seasons.

Table e, on next page, 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 1966–67 amounted to 439 barrels as against 433 and 543 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 was 33 barrels, which is the lowest result ever recorded in pelagic whaling. During the seasons 1949/50–1958/59 the average daily production per catcher varied between 103 and 126 barrels.

In tables f and g, pages 15 and 16, the monthly catch of the various species of whales is recorded in absolute and percentage figures for a series of years.

The movement of the whaling activities northwards during the two seasons 1964/65 and 1965/66 did not continue in the last season. Between 40°–50° South Lat. the catch in 1966/67 resulted in 2,029 blue-whale units, and this represents about 58 per cent of the total catch, as compared with about 70 per cent in the season 1965–66 and about 38 per cent in 1964–65. The survey below shows the catch between each 10 degrees latitude in the Antarctic for the seasons 1958–59 and 1963/64–1966/67:

	Season 1958/59	Catch in blue-whale units				
		Season 1963/64	Season 1964/65	Season 1965/66	Season 1966/67	
40°–50° South Lat. ....	—	1,543	2,695	2,868	2,029	
50°–60° » » ....	5,299	6,124	4,006	639	543	
60°–70° » » ....	9,194	781	351	578	894	
70°–80° » » ....	741	—	—	—	41	
Total .....	15,234	8,448	7,052	4,085	3,507	

(To be continued on page 17.)

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

Years.	Species of whales caught.					
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Total.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1948-49.....	26.0	60.4	—	—	13.6	100
1949-50.....	21.3	62.2	7.3	0.3	8.9	100
1950-51.....	22.3	56.1	5.2	1.2	15.2	100
1951-52.....	15.7	63.0	4.8	0.1	16.4	100
1952-53.....	13.7	74.8	3.4	0.4	7.7	100
1953-54.....	8.6	80.0	1.9	0.8	8.7	100
1954-55.....	6.3	75.3	1.4	0.4	16.6	100
1955-56.....	4.5	71.3	4.0	0.8	19.4	100
1956-57.....	4.6	78.0	2.0	2.2	13.2	100
1957-58.....	4.7	70.1	1.1	6.6	17.5	100
1958-59.....	3.3	71.2	6.6	3.9	15.0	100
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

**Table e.—Average production per floating factory and catcher in the pelagic whaling in Antarctic 1957/58—1966/67.****I. Floating factories:**

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.
1957-58.....	1,845,147	20	92,257	1,381	69	26,741	1,336
1958-59.....	1,798,447	20	89,922	1,385	69	26,064	1,299
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 <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

**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>1)</sup> per catcher's day-work
				Total.	Average per catcher.		
	Barrels.		Barrels.			Barrels.	
1957-58....	1,845,147	237	7,785	16,344	69	113	1.82
1958-59....	1,798,447	235	7,653	16,275	69	111	1.89
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 <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

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

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

Species of whales, and seasons.	Nov.	Dec.	Jan.	Feb.	March.	April.	Total.	The Whali- ng Statistics' total figures.	
Total animals.	1957-58..	1,259	3,669	11,428	11,886	7,575	-	35,817	35,997
	1958-59..	731	3,477	12,628	12,800	6,453	-	36,089	36,261
	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
Blue- whales.	1957-58..	-	1	1	1,476	205	-	1,683	1,684
	1958-59..	-	-	-	780	407	-	1,187	1,191
	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
Fin- whales.	1957-58..	-	6	10,746	8,805	5,510	-	25,067	25,222
	1958-59..	-	7	11,818	8,615	5,247	-	25,687	25,837
	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
Hump- backs.	1957-58..	-	-	1	395	-	-	396	396
	1958-59..	-	-	-	2,393	-	-	2,393	2,394
	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	1
	1957-58..	-	-	46	681	1,648	-	2,375	2,385
Sei- whales.	1958-59..	-	-	205	586	603	-	1,394	1,402
	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
	1957-58..	1,259	3,662	634	529	212	-	6,296	6,310
Sperm- whales.	1958-59..	731	3,470	605	426	196	-	5,428	5,437
	1959-60..	357	2,548	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..	<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

<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.

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

Species of whales. Seasons.	Nov.	Dec.	Jan.	Feb.	March.	April.	Total.	The Whaling Statistics' total figures.
<i>Total animals</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	.....	.....	.....	.....	.....	.....	.....	.....
	1957-58	-	-	12.4	2.7	-	4.7	4.7
<i>Blue-whales</i>	1958-59	-	-	6.1	6.3	-	3.3	3.3
	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	-	-	-	-	-	-	-
<i>Fin-whales</i>	1957-58	0.2	94.0	74.1	72.7	-	70.0	70.1
	1958-59	0.2	93.6	67.3	81.3	-	71.2	71.2
	1959-60	0.6	42.4	83.0	76.1	69.5	80.8	72.6
	1960-61	6.7	50.5	86.1	68.5	69.9	58.6	70.6
	1961-62	-	75.5	83.0	74.0	67.4	21.0	70.8
	1962-63	-	69.7	78.1	66.3	51.9	15.2	62.0
	1963-64	-	60.3	48.9	53.1	46.6	12.2	48.0
	1964-65	-	58.5	23.5	13.2	18.5	10.9	23.3
	1965-66	-	7.5	8.4	6.2	18.6	6.7	9.5
	1966-67	-	9.0	12.6	22.9	15.0	0.2	14.3
<i>Hump-backs</i>	1957-58	-	-	3.3	-	-	1.1	1.1
	1958-59	-	-	18.7	-	-	6.6	6.6
	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	-	-	-	-	-	-	-
	1966-67	-	-	-	-	-	-	-
<i>Sei-whales</i>	1957-58	-	0.4	5.7	21.8	-	6.6	6.6
	1958-59	-	1.6	4.6	9.4	-	3.9	3.9
	1959-60	-	0.5	4.3	14.3	15.3	8.6	8.9
	1960-61	-	0.1	4.8	16.5	18.5	19.1	11.1
	1961-62	-	3.6	5.9	14.1	22.8	34.7	12.7
	1962-63	-	7.9	8.4	23.0	33.9	28.8	18.2
	1963-64	-	12.2	36.1	31.3	35.0	16.2	28.6
	1964-65	-	23.9	70.9	76.2	66.1	19.6	63.3
	1965-66	-	74.0	76.6	85.7	62.0	12.4	71.9
	1966-67	-	75.3	66.2	63.4	58.3	2.1	61.2
<i>Sperm-whales</i>	1957-58	100.0	99.8	5.6	4.5	2.8	-	17.6
	1958-59	100.0	99.8	4.8	3.3	3.0	-	15.0
	1959-60	99.4	57.1	3.0	4.4	4.2	8.4	11.4
	1960-61	93.3	49.2	3.5	3.9	6.3	20.9	12.0
	1961-62	100.0	20.9	8.1	4.6	6.6	33.3	12.7
	1962-63	100.0	22.4	10.0	8.0	6.3	38.1	15.8
	1963-64	100.0	27.5	15.0	15.3	17.5	68.4	23.0
	1964-65	100.0	17.6	5.6	10.6	15.3	69.4	13.4
	1965-66	100.0	18.5	15.0	8.1	19.3	80.9	18.6
	1966-67	100.0	15.7	21.2	13.7	26.7	97.7	24.5

The distribution of the various species of whales caught in the season 1966–67 was as follows:

Catch between each 10 degrees latitude in the Antarctic.

	Blue-whales	Fin-whales	Sei-whales	Sperm-whales	Total of whales
40°–50° South Lat. . . . .	4	1,124	8,775	1,921	11,824
50°–60°   »   » . . . . .	—	330	2,270	442	3,042
60°–70°   »   » . . . . .	—	1,350	1,315	2,389	5,054
70°–80°   »   » . . . . .	—	81	—	198	279
Total . . . . .	4	2,885	12,360	4,950	20,199

*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	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		Area II		Area III		Area IV		Area V		Area VI		Total blue-whale units
	Blue-whale units	Per cent											
1959–60..	322	2.1	2,585	16.8	4,983	32.3	3,765	24.4	3,401	22.0	365	2.4	15,421
1960–61..	241	1.5	2,929	17.9	7,885	48.1	1,211	7.4	1,887	11.5	2,222	13.6	16,375
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

In the last season the catch in Area III amounted to about 55 per cent of the total pelagic catch, as compared with about 24 and 10 per cent during the previous two seasons. On the other hand the total catch in Area II amounted to only 8.5 per cent against 60 per cent in 1965–66 and 70 per cent in 1964–65.

Table h, 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 h.—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
	<b>Blue-whales.</b>			Eng. ft.			Eng. ft.			Eng. ft.
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	1945/46-1950/51	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	<sup>2)</sup> 38,437	20.3	78.6	<sup>7)</sup> 77,042	40.7	78.2	<sup>7)</sup> 56,481	29.9	79.5
	<b>Fin-whales.</b>									
1	1931/32-1939/40	<sup>3)</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	1945/46-1952/53	43,446	32.7	67.5	47,858	36.0	67.6	21,817	16.4	67.1
4	1953-54 .....	7,653	31.0	67.4	11,459	46.4	67.0	2,195	8.9	67.0
5	1954-55 .....	4,963	19.4	67.3	13,607	53.1	66.4	2,790	10.9	66.4
6	1955-56 .....	6,619	26.4	66.2	7,088	28.2	66.8	3,208	12.8	66.5
7	1956-57 .....	10,697	41.9	67.4	3,812	15.0	67.2	291	1.1	64.6
8	1957-58 .....	5,211	20.8	67.3	9,197	36.7	66.7	3,579	14.3	65.6
9	1958-59 .....	4,298	16.7	67.1	9,385	36.6	66.4	7,277	28.3	66.5
10	1959-60 .....	4,920	18.7	66.9	9,307	35.4	66.7	6,501	24.8	66.3
11	1960-61 .....	5,223	19.1	66.6	13,269	48.6	67.5	2,086	7.7	65.7
12	1961-62 .....	6,650	25.2	67.5	11,847	44.9	66.7	3,129	11.9	64.8
13	1962-63 .....	5,570	29.9	67.0	8,977	48.2	65.9	1,725	9.3	65.4
14	1963-64 .....	7,319	52.8	67.4	4,753	34.3	66.0	603	4.4	64.5
15	1964-65 .....	4,528	62.0	65.6	1,199	16.4	65.7	766	10.5	64.6
16	1965-66 .....	636	27.5	64.5	1,008	43.6	66.4	64	2.8	64.5
17	1966-67 .....	81	2.8	65.6	1,554	53.9	66.4	372	12.9	67.0
	1931/32-1966/67	159,840	31.1	67.3	193,548	37.7	67.0	76,890	15.0	66.9
	<b>Humpbacks.</b>									
1	1931/32-1940/41	<sup>4)</sup> 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	<sup>6)</sup> 1,537	5.4	41.3	<sup>5)</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.	Average Per cent.	Average size of the whales.	Number of whales caught.	Average Per cent.	Average size of the whales.	Number of whales caught.	Average Per cent.	Average size of the whales.	Number of whales caught.	Average 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
12,897	9.7	67.6	6,484	4.9	68.0	462	0.3	68.5	132,964	100	67.5	134,058	3
654	2.7	66.9	2,616	10.6	66.8	98	0.4	66.6	24,675	100	67.1	24,986	4
3,021	11.8	66.0	1,227	4.8	66.4	-	-	-	25,608	100	66.5	25,878	5
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	6
23	0.1	65.0	5,064	19.9	65.9	5,615	22.0	66.8	25,502	100	66.9	25,700	7
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	8
2,625	10.2	65.6	2,102	8.2	64.6	-	-	-	25,687	100	66.3	25,837	9
4,730	18.0	66.8	401	1.5	65.1	412	1.6	64.5	26,271	100	66.6	26,415	10
3,174	11.6	66.9	3,174	11.6	64.9	373	1.4	65.2	27,299	100	66.8	27,374	11
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	12
645	3.5	66.7	346	1.8	64.8	1,373	7.3	65.7	18,636	100	66.2	18,668	13
1,144	8.3	67.5	-	-	-	34	0.2	65.9	13,853	100	66.8	13,870	14
747	10.2	65.5	-	-	-	66	0.9	62.8	7,306	100	65.5	7,308	15
385	16.6	65.7	204	8.8	67.1	17	0.7	62.3	2,314	100	65.8	2,318	16
304	10.5	66.1	530	18.4	66.2	44	1.5	62.0	2,885	100	66.3	2,893	17
36,064	7.0	66.9	29,960	5.8	66.1	17,042	3.3	66.5	513,344	100	67.1	529,426	
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

The total number of sei-whales and sperm-whales killed in the different areas during the seasons 1965–66 and 1966–67 were as follows:

Areas	Sei-whales caught				Sperm-whales caught				
	Season 1965/66		Season 1966/67		Season 1965/66		Season 1966/67		
	Number	Per cent	Number	Per cent		Number	Per cent	Number	Per cent
Total .....	17,558	100.0	12,360	100.0		4,532	100.0	4,950	100.0
Of which in:									
Area I ..	35	0.2	3	—		11	0.2	1	—
» II ..	12,718	72.4	1,553	12.6		914	20.2	499	10.1
» III ..	2,756	15.7	6,860	55.5		534	11.8	1,151	23.3
» IV ..	442	2.5	2,825	22.9		617	13.6	777	15.7
» V ..	1,008	5.8	717	5.8		2,209	48.7	2,091	42.2
» VI ..	599	3.4	402	3.2		247	5.5	431	8.7

Table i, below, contains a summary of the number of whales killed by species in each area during the period 1931/32—1966/67. Of a total catch of 912,005 whales during this period about 56 per cent have been fin-whales, 21 per cent blue-whales, 11 per cent sperm-whales, 9 per cent sei-whales and 3 per cent humpbacks. About 64 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 i.—Number of whales killed during the seasons 1931/32—1966/67.

— 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
II ...	38,437	20.3	159,840	31.1	1,537	5.4	40,430	49.5	21,432	21.6	261,676	28.7
III ...	77,042	40.7	193,548	37.7	7,881	27.5	14,653	17.9	32,524	32.8	325,648	35.7
IV ...	56,481	29.9	76,890	15.0	12,457	43.5	7,548	9.2	20,840	21.0	174,216	19.1
V ...	11,759	6.2	36,064	7.0	4,060	14.2	9,783	12.0	19,054	19.2	80,720	8.8
VI ...	4,548	2.4	29,960	5.9	1,238	4.3	5,619	6.9	2,984	3.0	44,349	4.9
I ....	890	0.5	17,042	3.3	1,456	5.1	3,635	4.5	2,373	2.4	25,396	2.8
Total	189,157	100.0	513,344	100.0	28,629	100.0	81,668	100.0	99,207	100.0	912,005	100.0

— 2 —

Species of whales	Area II		Area III		Area IV		Area V		Area VI		Area I		Total	
	No. of whales	Per cent												
Blue.....	38,437	14.7	77,042	23.7	56,481	32.4	11,759	14.6	4,548	10.2	890	3.5	189,157	20.7
Fin.....	159,840	61.0	193,548	59.4	76,890	44.1	36,064	44.7	29,960	67.6	17,042	67.1	513,344	56.3
Humpback	1,537	0.6	7,881	2.4	12,457	7.2	4,060	5.0	1,238	2.8	1,456	5.7	28,629	3.1
Sei .....	40,430	15.5	14,653	4.5	7,548	4.3	9,783	12.1	5,619	12.7	3,635	14.3	81,668	9.0
Sperm ....	21,432	8.2	32,524	10.0	20,840	12.0	19,054	23.6	2,984	6.7	2,373	9.4	99,207	10.9
Total .....	261,676	100.0	325,648	100.0	174,216	100.0	80,720	100.0	44,349	100.0	25,396	100.0	912,005	100.0

**Table j.—Average size of whales killed in the Antarctic, by whaling grounds and species of whales 1957/58—1966/67.**

Whaling grounds and species of whales.	1957 -58	1958 -59	1959 -60	1960 -61	1961 -62	1962 -63	1963 -64	1964 -65	1965 -66	1966 -67
<b>Pelagic whaling.</b>										
<i>Blue-whales.</i>	Engl. feet.									
Males .....	75.4	76.0	74.5	72.8	73.8	72.9	69.7	66.2	—	59.8
Females .....	79.0	80.2	77.0	75.2	76.7	73.3	71.2	71.2	86.0	—
Total animals .....	77.1	78.3	75.9	74.0	75.3	73.1	70.4	69.7	86.0	59.8
<i>Fin-whales.</i>										
Males .....	64.7	64.8	65.0	65.1	64.4	64.1	64.7	63.6	64.0	64.7
Females .....	67.7	67.8	68.1	68.4	68.2	67.8	68.6	67.1	67.2	67.8
Total animals .....	66.2	66.3	66.6	66.8	66.5	66.2	66.8	65.5	65.8	66.3
<i>Humpbacks.</i>										
Males .....	40.8	39.2	39.8	40.6	40.4	39.9	—	—	43.0	—
Females .....	42.1	40.7	41.8	42.2	41.9	42.7	40.0	—	—	—
Total animals .....	41.5	40.0	40.9	41.4	41.4	41.6	40.0	—	43.0	—
<i>Sei-whales.</i>										
Males .....	48.3	48.8	48.7	48.6	48.7	48.4	48.5	48.3	47.5	47.0
Females .....	51.3	51.4	51.3	51.4	51.3	50.9	50.8	50.5	48.9	48.9
Total animals .....	50.3	50.8	50.5	50.2	50.3	49.8	49.6	49.3	48.0	47.9
<i>Sperm-whales.</i>										
Males .....	47.5	47.2	47.3	46.8	46.3	46.5	45.7	45.8	46.3	<sup>1)</sup> 46.4
Females .....	36.5	—	39.0	—	41.0	38.6	38.6	38.2	37.8	<sup>1)</sup> 36.4
Total animals .....	47.5	47.2	47.3	46.8	46.3	46.4	45.3	45.6	45.3	<sup>1)</sup> 46.4
<b>South Georgia.</b>										
<i>Blue-whales, total</i> .....	74.5	64.0	73.0	72.8	—	—	—	—	—	—
<i>Fin-whales, total</i> .....	66.1	65.9	66.4	64.0	62.9	—	66.9	66.9	64.1	—
<i>Humpbacks, total</i> .....	—	—	—	—	—	—	—	—	—	—
<i>Sei-whales, total</i> .....	50.1	49.8	49.5	49.3	48.6	—	49.8	49.8	53.0	—
<i>Sperm-whales, total</i> .....	47.1	46.5	47.6	46.9	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 1957/58—1966/67.

As will be seen from this table the average size of the finwhales killed in 1966–67 increased by 0.5 feet to 66.3 feet. The average size of sei-whales killed was 47.9 feet, which was the lowest average size recorded for sei-whales in the Antarctic. The average size of sperm-whales killed increased by nearly 1 foot as compared with the three previous seasons.

#### *Mature and immature whales.*

Table k, page 22, 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 23.

Table l, page 23, gives a survey of the pelagic whaling results of the individual participating countries as from 1957–58 regarding the number of whales killed, oil production and number of catchers employed.

Table k.—Antarctic, pelagic whaling. Catch of immature and mature whales 1957/58—1966/67.

	1957—58.		1958—59.		1959—60.		1960—61.		1961—62.		1962—63.		1963—64.		1964—65.		1965—66.		1966—67.	
	Number of whales.	Per cent.																		
<b>Blue-whales.</b>																				
Immature																				
males.....	316	36.9	175	33.0	267	46.5	618	71.3	310	61.0	356	76.6	—	—	—	—	—	—	—	
females ...	332	40.2	219	33.3	351	56.7	629	72.1	347	57.1	403	84.1	—	—	—	—	—	—	—	
animals ...	648	38.5	394	33.2	618	50.3	1,247	71.7	657	58.9	759	80.4	—	—	—	—	—	—	—	
Mature																				
males.....	541	63.1	355	67.0	307	53.5	249	28.7	198	39.0	109	23.4	—	—	—	—	—	—	—	
females ...	494	59.8	438	66.7	303	43.3	243	27.9	261	42.9	76	15.9	—	—	—	—	1	100.0	—	
animals ...	1,035	61.5	793	66.8	610	49.7	492	28.3	459	41.1	185	19.6	—	—	—	—	1	100.0	—	
<b>Fin-whales.</b>																				
Immature																				
males.....	3,629	30.0	3,654	28.9	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
females ...	4,052	31.3	4,041	31.0	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
animals ...	7,681	30.6	7,695	30.0	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
Mature																				
males.....	8,484	70.0	8,976	71.1	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
females ...	8,902	68.7	9,016	69.0	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
animals ...	17,386	69.4	17,992	70.0	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
<b>Humpbacks.</b>																				
Immature																				
males.....	58	30.9	658	57.2	271	47.7	140	37.8	40	35.7	57	52.8	—	—	—	—	—	—	—	
females ...	63	30.3	607	48.8	287	37.6	109	32.2	64	32.5	44	27.2	—	—	—	—	—	—	—	
animals ...	121	30.6	1,265	52.9	558	41.9	249	35.1	104	33.7	101	37.4	—	—	—	—	—	—	—	
Mature																				
males.....	130	69.1	492	42.8	297	52.3	230	62.2	72	64.3	51	47.2	—	—	—	—	1	100.0	—	
females ...	145	69.7	636	51.2	477	62.4	230	67.8	133	67.5	118	72.8	2	100.0	—	—	—	—	—	
animals ...	275	69.4	1,128	47.1	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 1957/58—1966/67.**

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
1957-58	35,997	2,146,206	237	13,289	853,810	94	5,534	323,472	37
1958-59	36,261	2,050,241	235	13,292	796,986	93	4,600	259,723	37
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	—	—	—
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
1957-58	11,763	Barrels 627,849	68	1,867	Barrels 116,497	14	3,544	Barrels 224,578	24
1958-59	12,558	646,130	69	2,226	126,488	12	3,585	220,914	24
1959-60	12,359	617,141	69	2,081	143,050	13	6,828	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

<sup>1)</sup> 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 0.73 in 1959-60 and only 0.30 in the last season.

Seasons	Average result of blue-whale units per catcher day.						All areas
	Area I	Area II	Area III	Area IV	Area V	Area VI	
1959-60 .....	0.62	0.55	0.68	0.91	0.87	0.57	0.73
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

### South Georgia.

The whaling results from South Georgia for each season since 1947-48 are given in table m, below. There were no whaling operations from South Georgia during the seasons 1962-63 and 1966-67. Otherwise, whaling has been carried on from South Georgia ever since the Antarctic whaling commenced in 1904-05.

**Table m.—South Georgia.**

Years.	Species of whales caught.							Oil production.	Expeditions.			Number of whales per boat.
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Others.	Total of whales.		Shore stations.	Floating factories.	Catchers.	
1947-48	46	2,142	24	609	128	—	2,949	Barrels 163,398	3	—	21	140
1948-49	226	1,922	18	562	213	—	2,941	172,194	3	—	21	140
1949-50	14	1,999	26	1,183	157	—	3,379	147,121	3	—	21	161
1950-51	82	1,982	8	519	226	—	2,817	151,192	3	—	21	134
1951-52	6	2,007	10	498	141	—	2,662	144,375	3	—	21	127
1952-53	4	1,670	9	498	147	—	2,328	120,003	3	—	21	111
1953-54	13	2,673	11	778	179	—	3,654	184,836	3	—	21	174
1954-55	13	2,746	2	423	82	—	3,266	180,766	3	—	21	156
1955-56	3	2,669	—	284	93	—	3,049	172,363	3	—	21	145
1956-57	7	2,057	—	980	84	—	3,128	148,068	3	—	21	149
1957-58	6	2,251	—	924	225	—	3,406	171,432	2	—	<sup>2)</sup> 20	150
1958-59	1	1,291	—	1,019	215	—	2,526	102,418	3	—	21	120
1959-60	9	1,160	—	1,075	89	—	2,333	97,546	3	—	21	111
1960-61	4	1,387	—	792	134	—	2,317	109,727	3	—	<sup>2)</sup> 16	138
1961-62	—	661	—	447	86	—	1,194	49,815	1	—	8	149
1962-63	—	—	—	—	—	—	—	—	—	—	—	—
1963-64	—	552	—	409	60	—	1,021	41,282	2	—	<sup>3)</sup> 16	—
1964-65	—	503	—	506	141	—	1,150	45,805	2	—	<sup>3)</sup> 21	—
1965-66	—	218	—	4	17	—	239	9,964	1	—	<sup>4)</sup> 10	—
1966-67	—	—	—	—	—	—	—	—	—	—	—	—

<sup>1)</sup> Right-whale. <sup>2)</sup> In addition some whaling boats, which in advance of and after the pelagic baleen whale season were operating from South Georgia. These whaling boats are included under the pelagic whaling. To this fact due consideration has been taken by calculating the "Number of whales per boat." <sup>3)</sup> Some of these catchers were transferred to the pelagic expeditions after about 2 months' catch. <sup>4)</sup> These catchers were transferred to the pelagic expeditions after about 2 months' catch.

Tables n and o, pages 25 and 26, give the catch off South Georgia by months in absolute and percentage figures from and including 1957-58. Table p, page 27, shows the proportion of mature and immature whales killed.

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

**Table o.—South Georgia. Catch by months in percentage figures.**

Table p.—South Georgia. Catch of immature and mature whales 1957/58—1966/67.

	1957—58.		1958—59.		1959—60.		1960—61.		1961—62.		1962—63.		1963—64.		1964—65.		1965—66.		1966—67.	
	Number of whales.	Per cent.																		
<b>Blue-whales.</b>																				
Immature																				
males	4	100.0	1	100.0	3	100.0	1	100.0	—	—	—	—	—	—	—	—	—	—	—	—
females	1	50.0	—	—	4	66.7	2	66.7	—	—	—	—	—	—	—	—	—	—	—	—
animals	5	83.3	1	100.0	7	77.8	3	75.0	—	—	—	—	—	—	—	—	—	—	—	—
Mature																				
males	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
females	1	50.0	—	—	2	33.3	1	33.3	—	—	—	—	—	—	—	—	—	—	—	—
animals	1	16.7	—	—	2	22.2	1	25.0	—	—	—	—	—	—	—	—	—	—	—	—
<b>Fin-whales.</b>																				
Immature																				
males	366	38.4	228	39.9	159	35.7	322	48.5	179	59.5	—	—	72	33.3	75	40.8	55	54.5	—	—
females	402	31.9	222	31.5	226	32.4	347	50.0	207	58.3	—	—	91	28.0	83	27.1	48	42.5	—	—
animals	768	34.7	450	35.3	385	33.7	669	49.3	386	58.8	—	—	163	30.1	158	32.2	103	48.1	—	—
Mature																				
males	588	61.6	344	60.1	286	64.3	342	51.5	122	40.5	—	—	144	66.7	109	59.2	46	45.5	—	—
females	859	68.1	482	68.5	472	67.6	347	50.0	148	41.7	—	—	234	72.0	223	72.9	65	57.5	—	—
animals	1,447	65.3	826	64.7	758	66.3	689	50.7	270	41.2	—	—	378	69.9	332	67.8	111	51.9	—	—

Table q.—Antarctic whaling results for the various countries 1957/58—1966/67.

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.
1957-58.	39,403	Barrels. <sup>1)</sup> 2,317,638	13,289	Barrels. 853,810	7,080	Barrels. 400,705	11,763	Barrels. 627,849	1,860	Barrels. 94,199	1,867	Barrels. 116,497	3,544	Barrels. 224,578
1958-59.	38,787	2,152,659	14,071	826,037	5,424	293,660	12,558	646,130	923	39,430	2,226	126,488	3,585	220,914
1959-60.	38,688	2,148,438	11,324	681,330	5,164	288,117	12,359	617,141	932	40,500	2,081	143,050	6,828	378,300
1960-61.	41,127	2,232,884	12,490	743,298	<sup>2)</sup> 5,813	<sup>2)</sup> 306,199	13,592	667,350	—	—	2,212	139,774	7,020	376,263
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
<i>In per cent</i>		%	%	%	%	%	%	%	%	%	%	%	%	%
1957-58.	100.0	100.0	33.7	36.8	18.0	17.3	29.9	27.1	4.7	4.1	4.7	5.0	9.0	9.7
1958-59.	100.0	100.0	36.3	38.4	14.0	13.6	32.4	30.0	2.4	1.8	5.7	5.9	9.2	10.3
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	10.00	30.4	33.3	<sup>2)</sup> 14.1	<sup>2)</sup> 13.7	33.0	29.9	—	—	5.4	6.3	17.1	16.8
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	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

<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 2.6 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 r.—Production of by-products in the Antarctic whaling in the seasons  
1948/49—1966/67.

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
1948-49 . . . . . Total	26,792	1,173	166	596	39,635	—	2,215
1949-50 . . . . . Total	25,852	817	250	573	46,824	779	1,629
1950-51 . . . . . Total	25,821	841	264	622	28,389	2,444	990
1951-52 . . . . . Total	24,116	823	195	435	28,299	5,760	874
1952-53 . . . . . Total	25,584	601	155	456	28,581	5,390	191
1953-54 . . . . . Total	35,660	185	199	385	34,792	9,885	2,072
1954-55 . . . . . Total	35,519	669	218	115	42,681	8,508	3,956
1955-56 . . . . . Total	43,189	755	252	162	45,835	7,546	2,815
1956-57 . . . . . Total	42,735	692	255	156	70,720	6,526	4,871
1957-58 . . . . . Total	44,914	595	238	113	85,595	9,633	12,100
1958-59 . . . . . Total	41,284	645	187	138	78,658	2,153	21,280
1959-60 . . . . . Total	53,024	1,316	131	—	95,997	1,038	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.							
Norway . . . . .	2,815	—	—	—	21,643	—	52
United Kingdom ..	4,942	—	—	—	—	—	406
Netherlands . . . . .	1,275	334	—	—	7,793	—	60
U.S.S.R. . . . .	19,139	1,160	—	—	13,229	—	—
Japan . . . . .	7,332	196	87	—	121,023	—	28,174
Total	35,503	1,690	87	—	163,688	—	28,692
1963-64.							
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
1964-65.							
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
1965-66.							
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
1966-67.							
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

<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 9,220,000 Mill. units of Vitamin A (Liver oil) were produced. <sup>3)</sup> In addition 8,650,000 Mill. units of Vitamin A (Liver oil) were produced. <sup>4)</sup> In addition 11,180,000 Mill. units of Vitamin A (Liver oil) were produced.

*Oil production by participating countries.*

In table q, page 28, the total whaling results in the Antarctic during the seasons 1957/58–1966/67 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				
	1962/63 Per cent	1963/64 Per cent	1964/65 Per cent	1965/66 Per cent	1966/67 Per cent
Japan .....	47.9	49.7	51.7	39.8	32.1
Netherlands .....	5.3	4.7	—	—	—
Norway .....	15.0	18.5	21.3	19.7	17.4
United Kingdom .....	5.3	—	—	—	—
U.S.S.R. .....	26.5	27.1	27.0	40.5	50.5
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 1957–58 has been recorded in table s, below. For the pelagic expeditions the average output was 109.5 barrels in 1966–67 against 109.7 and 121.0 barrels during the two preceding seasons.

**Table s.—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
1957–58.....	126.9	124.9	1962–63.....	—	114.6
1958–59.....	114.0	118.2	1963–64.....	112.1	122.0
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

<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 from and including the season 1959–60 has been recorded in the following survey:

Seasons	Average oil output per blue-whale unit during the last 8 seasons						Total Barrels
	Area I Barrels	Area II Barrels	Area III Barrels	Area IV Barrels	Area V Barrels	Area VI Barrels	
1959–60 ..	117.7	132.2	128.9	101.3	120.2	121.1	120.5
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

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

**Table t.—Average weekly production of whale-oil per blue-whale unit in the pelagic whaling 1965–66 and 1966–67.**

Season 1965–66.				Season 1966–67.			
Week ending	Production of whale-oil.	Number of blue-whale units.	Prod. per blue-whale unit.	Week ending	Production of whale-oil.	Number of blue-whale units.	Prod. per blue-whale unit.
	Barrels.		Barrels.		Barrels.		Barrels.
18/12 1965	22,520	240.1	93.3	17/12 1966	21,344	246.4	86.6
25/12 "	22,279	200.3	111.2	24/12 "	25,936	258.5	100.3
1/1 1966	30,608	293.7	104.2	31/12 "	21,485	214.1	100.4
8/1 "	27,682	272.7	101.5	7/1 1967	18,413	183.0	100.6
15/1 "	35,528	339.2	104.7	14/1 "	26,159	231.0	112.9
22/1 "	26,803	249.8	107.3	21/1 "	21,900	217.7	100.6
29/1 "	30,160	293.0	102.9	28/1 "	20,912	205.4	101.8
5/2 "	26,812	256.3	104.6	4/2 "	28,564	253.9	112.5
12/2 "	28,509	275.4	103.5	11/2 "	32,142	284.2	113.1
19/2 "	39,447	388.5	101.5	18/2 "	38,210	338.8	113.1
26/2 "	22,192	204.1	108.7	23/2 "	43,748	394.9	110.8
5/3 "	28,340	253.6	111.8	4/3 "	30,487	237.4	128.4
12/3 "	38,178	312.9	122.0	11/3 "	31,620	254.6	124.2
19/3 "	27,059	205.5	131.7	18/3 "	10,625	87.4	121.6
26/3 "	22,329	156.4	142.8	23/3 "	7,299	65.4	111.6
2/4 "	12,414	93.1	133.3	1/4 "	3,622	28.2	128.4
7/4 "	6,304	50.2	125.6	7/4 "	509	5.0	101.8
Total	447,164	4,084.8	109.5	Total	382,975	3,506.5	109.2

#### *By-products.*

In table r, page 29, detailed information is given on the production of by-products in the Antarctic during the seasons 1948/49–1966/67. From and including the season 1962–63 the figures are distributed in respect to the individual countries.



# TABLES

Antarctic season 1966/67.

**Table No. 1.—Whaling results for the various countries in the Antarctic in the season 1966/67.**

**Pelagic whaling.**

Countries, Geographical areas.	Species of whales caught.						Oil production.  Barrels <sup>1)</sup>	Expeditions.		
	Blue.	Fin.	Hump- back.	Sei.	Sperm.	Total of whales.		Shore sta- tions.	Floating fac- tories.	Catch- ers.
Japan:— Antarctic, pelagic	3	374	—	8,695	357	9,429	192,477	—	4	44
U.S.S.R.:— Antarctic, pelagic	—	1,662	—	1,441	4,008 <sup>2)</sup>	7,111	303,506	—	3	55
Norway:— Antarctic, pelagic	1	857	—	2,232	595 <sup>3)</sup>	3,685	104,683	—	2	21
Total	4	2,893	—	12,368	4,960	20,225	600,666	—	9	120

<sup>1)</sup> Barrel = 170 kg. (Barrel = abt. 1/4 long ton, 1 long ton = 1,016 kg.)

<sup>2)</sup> In addition 14 Minke-whales, 2 bottlenoses and 4 Killer-whales were caught.

<sup>3)</sup> In addition 3 Minke-whales were caught.

**Table No. 2.—Average size of whales caught in the Antarctic in the season 1966/67.**

**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	66.06	70.43	68.83
Males 1,375} Total 2,885.	” 2	68.00	68.29	68.25
Females 1,510}	” 3	64.54	70.67	67.85
	” 4	65.24	68.93	67.51
	” 5	65.58	67.53	66.52
	” 6	64.65	67.87	66.23
	” 7	64.89	67.30	66.16
	” 8	64.34	67.75	66.08
	” 9	63.31	66.36	64.97
Average		64.74	67.76	66.32

Table No. 2 (continued).

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
<b>Sei-whales.</b>				
<i>Antarctic, pelagic whaling .....</i>	No. 1	48.85	51.56	50.66
Males 6,464}	" 2	48.90	51.08	50.19
Females 5,896}	Total 12,360.	" 3	47.78	50.36
	" 4	47.59	49.54	48.47
	" 5	46.87	48.76	47.77
	" 6	46.87	48.60	47.71
	" 7	46.55	48.29	47.37
	" 8	46.65	48.24	47.33
	" 9	46.45	46.90	46.65
Average		47.00	48.90	47.91
<b>Sperm-whales.</b>				
<i>Antarctic, pelagic whaling .....</i>	No. 1	47.92	—	47.92
Males 4,857}	" 2	47.69	37.73	47.57
Females 42}	Total 4,899. <sup>1)</sup>	" 3	45.99	45.86
	" 4	45.66	—	45.66
	" 5	44.60	—	44.60
	" 6	40.50	—	40.50
	" 7	40.72	38.40	40.22
	" 8	39.93	41.00	39.94
Average		46.44	36.43	46.35

<sup>1)</sup> Excl. 51 sperm-whales caught for scientific purposes. The average size of these whales was 29.47 feet.

**Table No. 3.—Whales caught in the Antarctic in the season 1966/67,  
by species, sex and size.**

**Pelagic whaling.**

**Blue-whales.**

Engl. feet.	Number of		Total animals.	Average size: Males: 59.75 feet.
	males.	females.		
52	1	—	1	
59	1	—	1	
61	1	—	1	
67	1	—	1	
Sum	4	—	1) 4	

<sup>1)</sup> Incl. 3 blue-whales caught for scientific purposes.

Table No. 3 (continued).

## Fin-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
43	1	—	1	70	64	98	162
47	1	—	1	71	33	89	122
49	—	1	1	72	17	89	106
52	—	1	1	73	16	99	115
53	—	1	1	74	—	72	72
54	1	1	2	75	1	65	66
55	1	1	2	76	1	39	40
56	4	7	11	77	—	23	23
57	57	50	107	78	—	14	14
58	54	47	101	79	—	3	3
59	45	24	69	80	—	6	6
60	53	40	93	81	—	1	1
61	72	38	110	82	—	1	1
62	65	50	115				
63	85	61	146				
64	147	69	216				
65	159	89	248	Average size	Males:	64.74 feet	
66	148	107	255		Females:	67.76 "	
67	153	111	264		Total animals:	66.32 "	
68	122	112	234	Per cent	Males:	47.66	
69	75	101	176		Females:	52.34	

<sup>1)</sup> In addition 4 fin-whales caught for scientific purposes, length and sex not stated. On the other hand 2 fin-whales caught for scientific purposes, for which length and sex were stated, are included.

## Sei-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
32	—	1	1	52	111	743	854
38	3	—	3	53	27	379	406
39	—	2	2	54	6	186	192
40	153	147	300	55	1	107	108
41	176	157	333	56	—	37	37
42	165	126	291	57	1	7	8
43	218	161	379				
44	345	204	549				
45	501	248	749				
46	773	277	1,050	Average size	Males:	47.00 feet	
47	1,020	353	1,373		Females:	48.90 "	
48	1,173	533	1,706		Total animals:	47.91 "	
49	908	665	1,573	Per cent	Males:	52.30	
50	623	791	1,414		Females:	47.70	
51	260	772	1,032				

Table No. 3 (continued).

## Sperm-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
30	—	1	1	48	530	—	530
31	1	1	2	49	548	—	548
32	—	3	3	50	473	—	473
33	2	2	4	51	365	—	365
34	4	3	7	52	296	—	296
35	5	3	8	53	77	—	77
36	9	5	14	54	33	—	33
37	16	5	21	55	5	—	5
38	108	11	119	56	1	—	1
39	242	4	246	57	2	—	2
40	224	3	227				
41	173	1	174			Sum	4,857
42	193	—	193				
43	232	—	232			Average size	Males: 46.44 feet
44	231	—	231				Females: 36.43 "
45	292	—	292				Total animals: 46.35 "
46	375	—	375			Per cent	Males: 99.14
47	420	—	420				Females: 0.86

<sup>1)</sup> In addition 51 sperm-whales caught for scientific purposes.

The sex and size of the above mentioned 51 sperm-whales, caught for scientific purposes, were as follows:

Engl. feet.	Number of		Total animals.	Average size
	males.	females.		
18	2	—	2	
23	4	—	4	
26	2	2	4	
27	2	1	3	
28	—	1	1	
29	—	4	4	
30	2	4	6	
31	1	8	9	
32	—	10	10	
33	—	6	6	
34	—	1	1	
35	—	1	1	
Sum	13	38	51	

Males: 25.00 feet  
 Females: 31.00 "  
 Total animals: 29.47 "

Per cent { Males: 25.49  
 Females: 74.51

**Table No. 4.—Whales caught in the Antarctic in the season 1966/67,  
by species, sex and groups of size.**

**Antarctic, pelagic whaling.**

**Fin-whales.**

	Number of whales.	Per cent.
Group 1. (55 feet and less) .....	9	0.31
" 2. (56 feet to and incl. 65 feet) .....	1,216	42.15
" 3. (above 65 feet) .....	1,660	57.54
	2,885	100.00
Immature males .....	354	25.75
, females .....	391	25.89
" animals .....	745	25.82
Mature males .....	1,021	74.25
" females .....	1,119	74.11
" animals .....	2,140	74.18

**Table No. 5.—Average production of whale oil per blue-whale unit in  
the Antarctic in the season 1966/67.**

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.
<i>Antarctic, pelagic whaling .....</i>	No. 1	468.0	59,188	127.3
	" 2	355.3	40,971	115.6
	" 3	383.0	44,244	115.5
	" 4	301.2	34,594	114.9
	" 5	385.0	42,013	109.1
	" 6	349.7	36,600	104.7
	" 7	360.7	37,028	102.7
	" 8	466.0	45,994	98.7
	" 9	439.7	43,285	98.4
	Total	3,508.6	383,917	109.5

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

<sup>2)</sup> 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 1966/67.**

**Antarctic pelagic whaling.**

**Fin-whale females.**

Length of mothers. Engl. feet.	Number of pregnant animals.	Length of mothers. Engl. feet.	Number of pregnant animals.	
62	3	73	50	Number of foetuses measured ..... 486 of which twin pairs ..... 2 Total number of fin-whale females measured 1,510, of which pregnant animals 484, or 32.1 per cent.
63	8	74	40	
64	10	75	35	
65	14	76	28	
66	24	77	15	
67	37	78	6	
68	36	80	3	
69	47	82	1	
70	49			
71	38			
72	40			
		Total	484	

**Sei-whale females.**

Length of mothers. Engl. feet.	Number of pregnant animals.	Length of mothers. Engl. feet.	Number of pregnant animals.	
42	2	51	382	Number of foetuses measured ..... 2,371 of which twin pairs ..... 38 " " triplets ..... 2 Total number of sei-whale females measured 5,896, of which pregnant animals 2,329, or 39.5 per cent.
43	3	52	402	
44	7	53	224	
45	28	54	107	
46	62	55	65	
47	117	56	19	
48	208	57	3	
49	308			
50	392			
		Total	2,329	

**Sperm-whale females.**

Engl. feet.		
29	2	
31	2	
32	3	
33	1	Number of foetuses measured ..... 16 Total number of sperm-whale females measured 80 (incl. 38 caught for scientific purposes), of which pregnant animals 16 or 20 per cent.
34	1	
36	1	
38	3	
39	1	
40	1	
41	1	
Total	16	

**Table No. 7.—Whale foetuses measured in the Antarctic in the season 1966/67, 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"	6	1	—	—	7
1'—1' 11"	11	11	2	—	24
2'—2' 11"	8	10	8	—	26
3'—3' 11"	13	9	12	2	36
4'—4' 11"	18	13	25	9	65
5'—5' 11"	4	10	26	5	45
6'—6' 11"	2	22	22	7	53
7'—7' 11"	4	16	17	10	47
8'—8' 11"	1	10	25	3	39
9'—9' 11"	—	6	21	8	35
10'—10' 11"	—	3	18	8	29
11'—11' 11"	—	4	9	6	19
12'—12' 11"	—	3	14	5	22
13'—13' 11"	—	1	9	5	15
14'—14' 11"	—	—	8	1	9
15'—15' 11"	—	—	4	3	7
16'—16' 11"	—	1	—	—	1
17'—17' 11"	—	—	2	3	5
Total fin-whale foetuses . . . . .	67	120	<sup>1)</sup> 224	75	<sup>1)</sup> 486
Average size of foetuses . . . . .	3' 7"	6' 1"	7' 10"	9' 2"	7' 0"

<sup>1)</sup> Incl. 2 fin-whale foetuses, length not stated.

**Sei-whale foetuses.**

Groups of size. Engl. feet.	Dec.	Jan.	Febr.	March.	April.	Total.
0'—0' 11"	1	1	—	—	—	2
1'—1' 11"	23	10	1	—	—	34
2'—2' 11"	59	14	5	1	—	79
3'—3' 11"	118	38	14	2	—	172
4'—4' 11"	161	89	31	5	—	286
5'—5' 11"	158	112	50	10	—	330
6'—6' 11"	59	139	105	26	—	329
7'—7' 11"	17	92	146	29	—	284
8'—8' 11"	3	39	208	49	—	299
9'—9' 11"	1	8	170	74	—	253
10'—10' 11"	1	4	83	88	—	176
11'—11' 11"	—	—	29	54	—	83
12'—12' 11"	—	1	2	23	2	28
13'—13' 11"	1	—	—	6	—	7
14'—14' 11"	—	—	—	2	—	2
Total sei-whale foetuses . . . . .	602	547	844	369	2	<sup>1)</sup> 2,371
Average size of foetuses . . . . .	4' 5"	5' 9"	8' 1"	9' 6"	12' 7"	7' 10"

<sup>1)</sup> Incl. 7 sei-whale foetuses, length not stated.

Table No. 7 (continued).

## Sperm-whale foetuses.

Groups of size. Engl. feet.	Nov.	Dec.	April	May	Total
1'— 1' 11"	—	—	1	—	1
2'— 2' 11"	—	—	2	—	2
4'— 4' 11"	—	—	1	—	1
5'— 5' 11"	—	—	1	2	3
6'— 6' 11"	—	—	—	1	1
8'— 8' 11"	—	1	—	—	1
9'— 9' 11"	3	—	—	—	3
10'—10' 11"	1	—	—	—	1
11'—11' 11"	1	—	—	—	1
Total sperm-whale foetuses	<sup>1)</sup> 7	1	5	3	<sup>1)</sup> 16
Average size of foetuses	10' 1"	8' 6"	3' 3"	6' 2"	6' 8"

<sup>1)</sup> Incl. 2 sperm-whale foetuses, length not stated.

Table No. 8.—Whale foetuses measured in the Antarctic in the season 1966/67, 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	30	37	—	67	81.08
January	66	53	1	120	124.53
February	113	109	2	224	103.67
March	41	34	—	75	120.59
Total	250	233	3	486	107.30
<b>Sei-whale foetuses.</b>					
December	324	278	4	606	116.55
January	270	277	1	548	97.47
February	429	415	1	845	103.37
March	180	189	1	370	95.24
April	2	—	—	2	—
Total	1,205	1,159	7	2,371	103.97
<b>Sperm-whale foetuses.</b>					
November	1	4	2	7	25.00
December	1	—	—	1	—
April	3	2	—	5	150.00
May	1	2	—	3	50.00
Total	6	8	2	16	75.00

