

DET NORSKE HVALRÅDS STATISTISKE PUBLIKASJONER

INTERNATIONAL  
WHALING STATISTICS

XLVI

EDITED BY  
THE COMMITTEE FOR WHALING STATISTICS



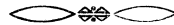
OSLO 1961

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## PREFACE

The present publication, International Whaling Statistics No. XLVI, embraces the results of the Antarctic whaling during the season 1959-60.

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

Oslo, March 1961.

*Gunnar Jahn.*

*Birger Bergersen.*

*Einar Vangstein.*



## INTRODUCTION

### *Regulative provisions.*

In view of the failure of the Antarctic pelagic whaling countries to reach agreement on national quotas, the Netherlands and Norway withdrew from the International Whaling Convention as from July 1, 1959.

At the meeting of the Commission in 1959 the Norwegian commissioner stated that the Norwegian Government intended to grant the Norwegian fleet a quota of blue-whale units, and in order to preserve the whale stock to the largest possible extent, this quota would be kept as low as possible and would be stipulated in relation to the number of units which the other countries might authorize their fleets to take.

The Netherlands Government stated that the Netherlands whaling company had expressed its readiness not to exceed a catch of 1,200 blue-whale units and that the company would adhere to the regulations laid down in the Schedule for the 1958-59 season with the exception of the restrictions concerning the number of whales to be caught and the period during which they might be taken.

During the summer 1959 the Norwegian Government approached the governments of Japan, the Netherlands and the United Kingdom, proposing that Norway and the said countries for the season 1959-60 should restrict their catch to the number of blue-whale units taken in the season 1958-59. The result of the approach was that the Norwegian Government for the Norwegian expeditions stipulated a maximum catch of 5,800 units, which corresponded to the catch in the season 1958-59. The Japanese companies agreed voluntarily to restrict their catch to about 5,000 units, i.e. the same number of units as the Japanese expeditions had in the season 1958-59. For the British expeditions the maximum catch was stipulated at 2,500 units. The Netherlands Government notified that they had no authority to restrict the Netherlands catch, but stated that the Netherlands whaling company had declared that the catch should not exceed 1,200 units.

Altogether these maximum catches amounted to 14,500 units. In addition came the catch of the 2 Soviet-Russian expeditions. At the time of departure of the expeditions in the autumn 1959 it was therefore calculated that the total catch would amount to about 16,000-17,000 units.



**Table a.—Weekly catch of whales in blue-whale units,**  
according to telegraphic reports from the whaling grounds.

Season 1957—58.		Season 1958—59.		Season 1959—60.	
Week ending	Number of blue-whale units	Week ending	Number of blue-whale units	Week ending	Number of blue-whale units
7/1—11/1	1,094	7/1—10/1	1,038	28/12—2/1	1) 1,400
18/1	1,730	17/1	1,593	9/1	1,416
25/1	1,387	24/1	1,772	16/1	1,323
1/2	1,335	31/1	1,564	23/1	1,490
8/2	1,729	7/2	2,189	30/1	1,151
15/2	1,580	14/2	1,361	6/2	1,455
22/2	1,372	21/2	1,040	13/2	1,019
1/3	1,496	28/2	1,530	20/2	1,150
8/3	1,333	7/3	1,479	27/2	1,118
9/3—16/3	1,783	8/3—16/3	1,722	5/3	937
				12/3	627
				19/3	901
				26/3	794
				2/4	267
				3/4—7/4	2) 458
<b>Total</b> 7/1—16/3 (69 days)	<b>14,839</b>	<b>Total</b> 7/1—16/3 (69 days)	<b>15,288</b>	<b>Total</b> 28/12—7/4 (102 days)	<b>15,506</b>

1) Includes the catch of one expedition from and incl. December 16th 1959.

2) Includes the catch of one expedition up to and incl. April 15th 1960.

Below are given some of the more important regulations laid down in the International Whaling Convention:—

1. The open season for the taking of fin- and sei-whales was from December 28th.
2. The open season for the taking of blue-whales was from February 1st.
3. The open season for taking of humpback whales was January 20th, 21st, 22nd and 23rd.
4. The season was open to april 7th inclusive for the taking of baleen whales.
5. The number of baleen whales taken during the open season in any waters south of 40° South Latitude by whale catchers attached to factory ships was not to exceed 15,000 blue-whale units. (As one blue-whale unit is reckoned 1 blue-whale or 2 fin-whales or 2½ humpbacks or 6 sei-whales.)
6. It was forbidden to take:

Blue-whales	under 70 feet	
Fin-whales	»	57 »
Sei-whales	»	40 »
Humpbacks	»	35 »

Further it was forbidden to kill grey-whales, right-whales, and female

**Table b.—Number and gross tonnage of floating factories and catchers engaged in pelagic whaling in the Antarctic 1943/44—1959/60.**

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.
1943-44....	1	12,215	12,215	8	2,480	310	1,013
1944-45....	1	14,362	14,362	8	2,480	310	1,013
1945-46....	9	123,499	13,722	77	24,326	316	1,190
1946-47....	15	198,179	13,212	129	42,307	328	1,233
1947-48....	17	234,759	13,809	162	56,156	347	1,302
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

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

whales accompanied by a calf. The Convention also contained a provision enjoining full utilization of whales.

7. The taking of humpback whales was prohibited between 0° and 60° West Longitude.
8. The open season for sperm-whales was 8 months and the minimum size limit was 38 feet.

The shore stations on South Georgia were allowed a 6 months' consecutive catching period, and were otherwise subject to the same provisions as stated in paragraphs 6, 7 and 8, except that the minimum size limit for sperm-whales was 35 feet.

#### *Duration of the whaling period.*

Since 1954-55 the baleen whale season has commenced on January 7th. At the meeting of the Commission in 1959 it was resolved that the catch of baleen whales could commence on December 28th, with the same date of termination as previously, viz. April 7th. All expeditions, except the one from the Netherlands, commenced whaling on December 28th and terminated when the stipulated voluntary maximum catch had been reached, however, not later than April 7th. The Netherlands expedition commenced operations on December 16th and terminated on April 15th.

Below is given the period of operation during the last season for the various groups of expeditions:

Expeditions	Whaling period, season 1959—60	Catching days
Norwegian . . . . .	December 28th—April 7th	102
British . . . . .	December 28th—April 7th	102
Japanese . . . . .	December 28th—March 26th	90
Sovjet Russian: . . . . .		
Sovietskaya Ukraina..	December 28th—March 31st	95
Slava . . . . .	December 28th—March 27th	91
The Netherlands . . . . .	December 16th—April 15th	122
	<u>Average</u>	<u>99</u>

The whaling period and number of catching days for the pelagic baleen whaling operations in the seasons 1932–33, 1934–35, 1936–37 and as from 1945–46 will be seen from the survey below:—

Season	Whaling period	Catching days
1932–33 . . . . .	October 20th—April 14th	177
1934–35 . . . . .	December 1st—March 31st	121
1936–37 . . . . .	December 8th—March 7th	90
1945–46 . . . . .	November 24th—March 24th	121
1946–47 . . . . .	December 8th—April 7th	121
1947–48 . . . . .	December 8th—March 31st	115
1948–49 . . . . .	December 15th—March 26th	102
1949–50 . . . . .	December 22nd—March 15th	84
1950–51 . . . . .	December 22nd—March 9th	78
1951–52 . . . . .	January 2nd—March 5th	64
1952–53 . . . . .	January 2nd—March 16th	74
1953–54 . . . . .	January 2nd—March 18th	76
1954–55 . . . . .	January 7th—March 19th	72
1955–56 . . . . .	January 7th—March 4th	58
1956–57 . . . . .	January 7th—March 16th	69
1957–58 . . . . .	January 7th—March 16th	69
1958–59 . . . . .	January 7th—March 16th	69
1959–60 . . . . .	December 28th—April 7th	102

The whaling period for blue-whales was until and including the season 1952–53 the same as the period for fin-whales. From and including the season 1953–54 the whaling period and the number of catching days for blue-whales have been as follows:—

Season	Whaling period	Catching days
1953-54 . . . . .	January 16th-March 18th	62
1954-55 . . . . .	January 21st-March 19th	58
1955-56 . . . . .	February 1st-March 4th	33
1956-57 . . . . .	February 1st-March 16th	44
1957-58 . . . . .	February 1st-March 16th	44
1958-59 . . . . .	February 1st-March 16th	44
1959-60 . . . . .	February 1st-April 7th	67

In the season 1959-60 it was permissible to take humpbacks from 0° and eastwards to 60° west during the period January 20th-23rd (for the Netherlands expedition February 1st-4th). During the six previous seasons the catching period for humpbacks was February 1st-4th.

*Weekly catch in blue-whale units.*

The weekly catch of the last three seasons, based on the telegraphic reports from the whaling grounds, are recorded in table *a*, page 8. As will appear from this table the weekly catches during the last season were lower than during the corresponding weeks of the two preceding seasons. The highest weekly catch last season — 1,490 blue-whale units — was obtained from January 17th-23rd, while only 627 units were obtained during the week March 6th-12th. In the season 1958-59 highest weekly catch was 2,189 units (February 1st-7th) and the lowest 1,040 units (February 15th-21st). In 1957-58 the corresponding figures were 1,730 blue-whale units (January 12th-18th) and 1,333 units (March 2nd-8th).

*Whaling matériel.*

During the Antarctic season 1959-60 5 countries carried on pelagic whaling with 20 floating factories and 220 catchers. This whaling matériel and the whaling matériel used in the preceding season belonged to the participating countries as follows:—

	Season 1959-60		Season 1958-59	
	Floating factories	Catchers	Floating factories	Catchers
Norway . . . . .	8	70	9	93
United Kingdom . . . . .	3	31	3	37
Japan . . . . .	6	69	6	69
The Netherlands . . . . .	1	13	1	12
U. S. S. R. . . . .	2	37	1	24
Total	20	220	20	235

Table c.—Total Antarctic.

Years.	Species of whales caught.						Total of whales.	Oil production.	Expeditions.			Number of whales per boat.
	Blue.	Fin.	Hump-back.	Sel.	Sperm.	Others.			Shore stations.	Floating factories.	Catchers.	
1919-20	1,874	3,213	261	71	8	1) <sup>1)</sup> 14	5,441	Barrels. 272,817	6	6	44	124
1920-21	2,617	5,491	260	36	31	1) <sup>1)</sup> 13	8,448	390,627	6	8	47	180
1921-22	4,416	2,492	9	103	3	—	7,023	452,517	6	8	46	153
1922-23	5,683	3,677	517	10	23	—	9,910	614,547	6	13	60	165
1923-24	3,732	3,035	233	193	66	1) <sup>1)</sup> 12	7,271	464,678	6	14	66	110
1924-25	5,703	4,366	359	1	59	—	10,488	697,091	6	13	65	161
1925-26	4,697	8,916	364	195	37	1) <sup>1)</sup> 10	14,219	783,307	6	15	70	203
1926-27	6,545	5,102	189	778	39	1) <sup>1)</sup> 12	12,665	872,362	6	17	80	158
1927-28	8,334	4,459	23	883	72	1) <sup>1)</sup> 4	13,775	1,037,392	6	18	84	164
1928-29	12,734	6,689	48	808	62	—	20,341	1,631,340	6	26	111	183
1929-30	17,898	11,614	853	216	73	1) <sup>1)</sup> 1	30,655	2,546,759	6	38	194	158
1930-31	29,410	10,017	576	145	51	1) <sup>1)</sup> 2	40,201	3,608,348	6	41	232	173
1931-32	6,488	2,871	184	16	13	—	9,572	808,560	2	5	45	213
1932-33	18,891	5,168	159	2	107	—	24,327	2,456,462	1	17	118	206
1933-34	17,349	7,200	872	—	666	—	26,087	2,395,544	2	19	126	207
1934-35	16,500	12,500	1,965	266	577	—	31,808	2,453,999	2	23	153	208
1935-36	17,731	9,697	3,162	2	399	—	30,991	2,436,338	2	24	175	177
1936-37	14,304	14,381	4,477	490	926	1) <sup>1)</sup> 1	34,579	2,658,108	2	30	196	176
1937-38	14,923	28,009	2,079	161	867	—	46,039	3,340,330	2	31	256	180
1938-39	14,081	20,784	883	22	2,585	1) <sup>1)</sup> 1	38,356	2,820,771	2	34	281	136
1939-40	11,480	18,694	2	81	1,938	2) <sup>2)</sup> 705	32,900	2,544,253	2	28	240	137
1940-41	4,943	7,831	2,675	110	804	—	16,363	1,100,008	1	11	93	176
1941-42	59	1,189	16	52	109	—	1,425	77,819	2	—	12	119
1942-43	125	776	—	73	24	—	998	50,960	1	—	6	166
1943-44	339	1,158	4	197	101	—	1,799	132,001	1	1	15	120
1944-45	1,042	1,666	60	78	45	—	2,891	223,540	1	1	15	193
1945-46	3,606	9,185	238	85	273	—	13,387	818,652	3	9	93	144
1946-47	9,192	14,547	29	393	1,431	1) <sup>1)</sup> 1	25,593	1,939,742	3	15	147	174
1947-48	6,908	21,141	26	621	2,622	—	31,318	2,104,051	3	17	183	171
1948-49	7,625	19,123	31	578	4,078	—	31,435	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	3) <sup>3)</sup> 1	33,997	2,303,690	3	19	260	131
1951-52	5,130	22,527	1,556	530	5,485	4) <sup>4)</sup> 9	35,237	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	4) <sup>4)</sup> 3	34,872	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	4) <sup>4)</sup> 42	38,580	2,307,171	3	19	278	139
1956-57	1,512	27,757	679	1,692	4,429	4) <sup>4)</sup> 46	36,115	2,246,922	3	20	246	147
1957-58	1,690	27,473	396	3,309	6,535	4) <sup>4)</sup> 493	39,896	2,317,638	2	20	257	155
1958-59	1,192	27,128	2,394	2,421	5,652	4) <sup>4)</sup> 103	38,890	2,152,659	3	20	256	152
1959-60	1,239	27,575	1,338	4,309	4,227	4) <sup>4)</sup> 204	38,892	2,148,438	3	20	241	161

1) Right-whales. 2) 703 " Baleen-whales " no specification given, 2 right-whales. 3) Bottlenose. 4) Minke-whales.

As will be seen the Norwegian whaling fleet was reduced by one floating factory and 23 catchers in the season 1959-60 as compared with the season 1958-59. The British companies reduced their number of catchers by 6. Japan used the same number of floating factories and catchers, whereas Soviet-Russia increased the fleet by one floating factory and 13 catchers.

In addition to the pelagic expeditions 3 shore stations with 21 cat-

Table d.—Pelagic whaling in the Antarctic.<sup>1</sup>

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.	
1919-20	887	1,540	182	—	—	—	2,609	Barrels. 125,788	—	6	18	145
1920-21	1,761	2,848	157	—	—	—	4,766	213,490	1	8	26	183
1921-22	1,846	1,782	—	—	—	—	3,628	203,475	1	8	26	140
1922-23	2,114	2,232	197	—	4	—	4,547	266,994	1	12	37	123
1923-24	1,805	1,657	103	2	17	<sup>2)</sup> 12	3,596	217,215	1	13	43	84
1924-25	2,191	2,347	97	—	35	—	4,670	290,915	1	12	41	114
1925-26	2,842	3,207	128	182	25	<sup>2)</sup> 10	6,394	378,850	1	14	47	136
1926-27	2,856	3,958	189	413	22	<sup>2)</sup> 12	7,450	455,070	1	16	57	131
1927-28	6,209	3,102	23	788	12	<sup>2)</sup> 4	10,138	733,912	1	17	61	166
1928-29	11,174	3,559	33	412	31	—	15,209	1,282,711	1	25	88	173
1929-30	17,410	8,218	807	—	34	—	26,469	2,298,796	1	38	167	158
1930-31	28,325	8,601	510	1	27	<sup>2)</sup> 1	37,465	3,420,410	1	41	205	183
1931-32	6,050	1,136	178	—	3	—	7,367	686,355	—	5	33	223
1932-33	18,624	4,441	159	—	107	—	23,331	2,401,879	—	17	112	208
1933-34	16,813	5,472	780	—	659	—	23,724	2,263,357	—	19	114	208
1934-35	15,944	11,664	1,928	141	556	—	30,233	2,345,858	—	23	143	211
1935-36	16,510	9,177	3,121	2	396	—	29,206	2,293,153	—	24	165	177
1936-37	14,183	13,302	4,460	19	856	<sup>2)</sup> 1	32,821	2,576,479	—	30	184	178
1937-38	14,826	26,457	2,039	6	824	—	44,152	3,250,064	—	31	244	181
1938-39	13,849	19,477	883	3	2,468	<sup>2)</sup> 1	36,681	2,709,281	—	34	270	136
1939-40	11,392	17,757	2	1	1,853	<sup>3)</sup> 704	31,709	2,479,471	—	28	228	139
1940-41	4,936	7,084	2,675	22	778	—	15,495	1,055,510	—	11	88	176
1941-42	—	—	—	—	—	—	—	—	—	—	—	—
1942-43	—	—	—	—	—	—	—	—	—	—	—	—
1943-44	311	526	—	—	—	—	837	82,000	—	1	8	105
1944-45	914	679	—	2	—	—	1,595	148,000	—	1	8	199
1945-46	3,526	7,729	—	3	216	—	11,474	739,775	—	9	77	149
1946-47	8,865	12,877	1	2	1,298	—	23,043	1,794,424	—	15	129	175
1947-48	6,862	13,999	2	12	2,494	—	28,369	1,940,653	—	17	162	149
1948-49	7,399	17,201	13	16	3,865	—	28,494	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	<sup>4)</sup> 1	31,180	2,152,498	—	19	239	130
1951-52	5,124	20,520	1,546	<sup>2)</sup> 5,344	<sup>5)</sup> 9	—	32,575	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	<sup>5)</sup> 3	31,218	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	<sup>5)</sup> 42	35,531	2,134,808	—	19	257	138
1956-57	1,505	25,700	679	712	4,345	<sup>5)</sup> 46	32,987	2,098,854	—	20	225	147
1957-58	1,684	25,222	396	2,385	6,310	<sup>5)</sup> 493	36,490	2,146,206	—	20	237	154
1958-59	1,191	25,837	2,394	1,402	5,437	<sup>5)</sup> 103	36,364	2,050,241	—	20	235	155
1959-60	1,230	26,415	1,338	3,234	4,138	<sup>5)</sup> 204	36,559	2,050,892	—	20	220	166

<sup>1)</sup> For the seasons 1919/20-1930/31 the catch in the Ross Sea and from South Shetland and South Orkney is included in the figures for pelagic whaling in the Antarctic. <sup>2)</sup> Right-whales. <sup>3)</sup> 703 "Balcen whales" no specification given, 1 right-whale. <sup>4)</sup> Bottlenose. <sup>5)</sup> Minke-whales.

chers operated from South Georgia in 1959-60, i.e. with the same whaling matériel as in the previous season.

Table b, page 9, gives the number of floating factories and catchers engaged in pelagic whaling since the season 1943-44, the average gross tonnage of the floating factories and the average gross tonnage and engine power of the catchers. The average engine capacity of the catchers increased from 2,390 I.H.P. in 1958-59 to 2,557 I.H.P. in 1959-60. The survey on next page gives the number of floating factories, the number of

catchers and the number of catchers engaged per floating factory from and including 1945-46:—

Season	Number of floating factories	Number of catchers	Average number of catchers per floating factory
1945-46	9	77	8.6
1946-47	15	129	8.6
1947-48	17	162	9.5
1948-49	18	191	10.6
1949-50	18	216	12.0
1950-51	19	239	12.6
1951-52	19	263	13.8
1952-53	16	230	14.4
1953-54	17	206	12.1
1954-55	19	233	12.3
1955-56	19	257	13.5
1956-57	20	225	11.3
1957-58	20	237	11.9
1958-59	20	235	11.8
1959-60	20	220	11.0

It appears from this survey that the average number of catchers per floating factory was 11.0 in the season 1959-60, compared with 11.8 in the preceding season. In 1959-60 the Norwegian companies used on an average 8.8 catchers per floating factory, the British expeditions 10.3, the Japanese expeditions 11.5, the Netherlands 13.0 and the Russian expeditions 18.5 catchers.

#### *Catch results.*

The total catch of the pelagic expeditions amounted to 32,217 baleen whales, which, converted into blue-whale units, gave 15,511.7 units. This was 511.7 units more than the maximum catch stipulated by the Commission, and about 210 units more than obtained in the season 1958-59. The catch in 1959-60, with specification in respect to the various species of whales killed was as follows:

Species of whales	Captured whales	Of which lost whales	Processed whales	Catch in blue-whale units
Blue-whales	1,230	2	1,228	1,230.0
Fin-whales	26,415	144	26,271	13,207.5
Humpbacks	1,338	6	1,332	535.2
Sei-whales	3,234	15	3,219	539.0
Total baleen whales	32,217	167	32,050	15,511.7
Sperm-whales	4,138	10	4,128	—
Total of whales <sup>1)</sup>	36,355	177	36,178	15,511.7

<sup>1)</sup> In addition 204 Minke-whales and 55 killer-whales were taken,

**Table e.—Average production per floating factory and catcher in the pelagic whaling in Antarctic 1930/31—1938/39 and 1946/47—1959/60.**

**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.
1930-31 .....	3,384,048	41	82,538	6,940	169	20,024	488
1931-32 .....	686,193	5	137,239	773	155	4,427	888
1932-33 .....	2,395,042	17	140,885	2,470	145	16,518	970
1933-34 .....	2,225,663	19	117,140	2,298	121	18,394	969
1934-35 .....	2,312,702	23	100,552	2,831	123	18,802	817
1935-36 .....	2,269,524	24	94,564	2,329	97	23,397	974
1936-37 .....	2,527,026	30	84,234	2,881	96	26,323	877
1937-38 .....	3,201,153	31	103,263	3,157	102	31,384	1,014
1938-39 .....	2,564,506	34	75,427	3,273	96	26,714	784
1946-47 .....	1,728,370	15	115,225	1,667	111	15,571	1,037
1947-48 .....	1,809,560	17	106,445	1,914	113	16,014	945
1948-49 .....	1,844,867	18	102,493	1,818	101	18,236	1,015
1949-50 .....	1,888,968	18	104,943	1,492	83	22,759	1,266
1950-51 .....	1,909,640	19	100,507	1,471	77	24,801	1,298
1951-52 .....	2,054,853	19	108,150	1,216	64	32,107	1,690
1952-53 .....	1,884,207	16	117,763	1,184	74	25,462	1,591
1953-54 .....	1,964,994	17	115,588	1,292	76	25,855	1,521
1954-55 .....	1,780,067	19	93,688	1,356	71	25,071	1,313
1955-56 .....	1,797,069	19	94,583	1,104	58	30,984	1,628
1956-57 .....	1,883,961	20	94,198	1,371	69	27,304	1,374
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

**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.	
1930-31 ....	3,384,048	200	16,920	33,690	168	100	1.09
1931-32 ....	686,193	33	20,794	5,149	156	133	1.43
1932-33 ....	2,395,042	112	21,384	16,150	144	148	1.44
1933-34 ....	2,225,663	114	19,523	13,725	120	162	1.68
1934-35 ....	2,312,702	143	16,173	18,143	127	127	1.64
1935-36 ....	2,269,524	165	13,755	16,173	98	140	1.78
1936-37 ....	2,527,026	184	13,734	17,656	96	143	1.81
1937-38 ....	3,201,153	244	13,119	24,897	102	129	1.74
1938-39 ....	2,564,506	270	9,498	25,954	96	99	1.32
1946-47 ....	1,728,370	129	13,398	14,414	112	120	1.51
1947-48 ....	1,809,560	162	11,170	17,747	110	102	1.46
1948-49 ....	1,844,867	191	9,659	18,902	99	98	1.30
1949-50 ....	1,888,968	216	8,745	18,128	84	104	1.46
1950-51 ....	1,909,640	239	7,990	18,554	78	103	1.42
1951-52 ....	2,054,853	263	7,813	16,902	64	122	1.61
1952-53 ....	1,884,207	230	8,192	17,101	74	110	1.53
1953-54 ....	1,964,994	206	9,539	15,630	76	126	1.82
1954-55 ....	1,780,067	233	7,640	16,619	71	107	1.73
1955-56 ....	1,797,069	257	6,992	14,893	58	121	1.92
1956-57 ....	1,883,961	225	8,373	15,429	69	122	1.85
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	1.52

<sup>1)</sup> Not including sperm-whales.



Table f.—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.
1928-29.....	73.5	23.4	0.2	2.7	0.2	100
1929-30.....	65.8	31.0	3.1	—	0.1	100
1930-31.....	75.6	23.0	1.3	—	0.1	100
1931-32.....	82.1	15.4	2.4	—	0.1	100
1932-33.....	79.8	19.0	0.7	—	0.5	100
1933-34.....	70.9	23.1	3.3	—	2.7	100
1934-35.....	52.7	38.6	6.4	0.5	1.8	100
1935-36.....	56.5	31.4	10.7	—	1.4	100
1936-37.....	43.2	40.5	13.6	0.1	2.6	100
1937-38.....	33.5	59.9	4.6	0.1	1.9	100
1938-39.....	37.8	53.1	2.4	—	6.7	100
1939-40.....	36.7	57.3	—	—	6.0	100
1940-41.....	31.9	45.7	17.3	0.1	5.0	100
1943-44.....	37.2	62.8	—	—	—	100
1944-45.....	57.3	42.6	—	0.1	—	100
1945-46.....	30.7	67.4	—	—	1.9	100
1946-47.....	38.5	55.9	—	—	5.6	100
1947-48.....	24.2	67.0	—	—	8.8	100
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

As previously mentioned the maximum catches fixed for the various countries amounted to 14,500 blue-whale units. With the calculated catch of U.S.S.R., this would give a total catch of about 16,000 to 17,000 units. However, the catch amounted to 15,511.7 units, and was apportioned among the participating countries as follows:

Norway .....	4,568.0	blue-whale units
Japan .....	5,216.7	—»—
U.K. ....	1,900.5	—»—
The Netherlands .....	1,037.5	—»—
U.S.S.R. ....	2,789.0	—»—
Total.....	15,511.7	blue-whale units

As will appear from the above Norway, United Kingdom and the Netherlands did not reach the fixed maximum catches, mentioned on page 7.

Table g.—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>	1938-39..	1,362	10,138	12,618	9,978	2,569	—	1) 36,665	1) 36,681
	1951-52..	1,077	3,504	12,794	13,277	1,651	—	32,303	32,566
	1952-53..	64	1,444	12,302	9,764	4,465	—	28,039	28,325
	1953-54..	141	1,875	12,320	10,295	6,239	—	30,870	31,215
	1954-55..	424	3,480	12,842	11,401	5,914	—	34,061	34,388
	1955-56..	665	4,183	13,813	14,750	1,846	—	35,257	35,489
	1956-57..	373	2,753	11,483	14,000	4,114	—	32,723	32,941
	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	
<i>Blue-whales.</i>	1938-39..	849	5,128	4,892	2,365	605	—	13,839	13,849
	1951-52..	—	1	2,325	2,495	280	—	5,101	5,124
	1952-53..	—	6	2,150	1,249	441	—	3,847	3,866
	1953-54..	1	1	567	1,365	734	—	2,667	2,684
	1954-55..	—	—	645	965	544	—	2,154	2,163
	1955-56..	—	1	1	1,503	106	—	1,611	1,611
	1956-57..	—	1	1	1,178	325	—	1,505	1,505
	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	
<i>Fin-whales.</i>	1938-39..	64	3,608	6,956	7,057	1,792	—	19,477	19,477
	1951-52..	—	—	10,137	8,875	1,300	—	20,312	20,520
	1952-53..	1	5	9,940	7,400	3,618	—	20,964	21,197
	1953-54..	—	9	11,411	8,001	5,254	—	24,675	24,986
	1954-55..	—	5	11,128	9,521	4,954	—	25,608	25,878
	1955-56..	—	1	12,733	11,047	1,321	—	25,102	25,289
	1956-57..	—	3	10,777	11,345	3,377	—	25,502	25,700
	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	
<i>Hump-backs.</i>	1938-39..	134	456	235	58	—	—	883	883
	1951-52..	—	1	—	1,531	—	—	1,532	1,546
	1952-53..	—	2	—	938	1	—	941	954
	1953-54..	—	—	—	587	6	—	593	594
	1954-55..	—	3	2	487	—	—	492	493
	1955-56..	—	2	2	1,421	—	—	1,425	1,432
	1956-57..	—	—	—	673	—	—	673	679
	1957-58..	—	—	1	395	—	—	396	396
	1958-59..	—	—	—	2,393	—	—	2,393	2,394
1959-60..	—	—	1,257	74	1	—	1,332	1,338	
<i>Sei-whales.</i>	1938-39..	—	—	—	—	1) 4	—	1) 4	1) 4
	1951-52..	—	—	9	21	1	—	31	32
	1952-53..	—	—	1	22	92	—	115	123
	1953-54..	—	—	60	147	42	—	249	251
	1954-55..	—	—	7	95	43	—	145	146
	1955-56..	—	—	13	201	60	—	274	276
	1956-57..	—	—	83	428	197	—	708	712
	1957-58..	—	—	46	681	1,648	—	2,375	2,385
	1958-59..	—	—	205	586	603	—	1,394	1,402
1959-60..	—	22	556	1,532	1,010	99	3,219	3,234	
<i>Sperm-whales.</i>	1938-39..	315	946	535	498	168	—	2,462	2,468
	1951-52..	1,077	3,502	323	355	70	—	5,327	5,344
	1952-53..	62	1,431	211	155	313	—	2,172	2,185
	1953-54..	141	1,865	282	195	203	—	2,686	2,700
	1954-55..	424	3,472	1,060	333	373	—	5,662	5,708
	1955-56..	665	4,179	1,064	578	359	—	6,845	6,881
	1956-57..	373	2,749	622	376	215	—	4,335	4,345
	1957-58..	1,259	3,662	634	529	212	—	6,296	6,310
	1958-59..	731	3,470	605	426	196	—	5,428	5,437
1959-60..	357	2,548	383	436	278	96	4,128	4,138	

1) 1 right-whale included.

Table h.—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>	1938-39	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	1951-52	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	.....	.	.	.	.	.	.	.	
	.....	.	.	.	.	.	.	.	
<i>Blue-whales</i>	1938-39	62.4	50.6	38.8	23.7	23.6	-	37.8	37.8
	1951-52	-	0.1	18.2	18.8	17.0	-	15.8	15.7
	1952-53	-	0.4	17.5	12.8	9.9	-	13.7	13.7
	1953-54	1.6	0.1	4.6	13.3	11.8	-	8.7	8.6
	1954-55	-	-	5.0	8.5	9.2	-	6.3	6.3
	1955-56	-	-	-	10.2	5.7	-	4.6	4.5
	1956-57	-	-	-	8.4	7.9	-	4.6	4.6
	1957-58	-	-	-	12.4	2.7	-	4.7	4.7
	1958-59	-	-	-	6.1	6.3	-	3.3	3.3
	1959-60	-	-	-	4.5	10.9	2.2	3.4	3.4
<i>Fin-whales</i>	1938-39	4.7	35.6	55.1	70.7	69.8	-	53.1	53.1
	1951-52	-	-	79.2	66.8	78.7	-	62.9	63.0
	1952-53	-	0.4	80.8	75.8	81.0	-	74.8	74.8
	1953-54	1.5	0.5	92.6	77.7	84.2	-	79.9	80.0
	1954-55	-	0.1	86.6	83.5	83.8	-	75.2	75.3
	1955-56	-	-	92.2	74.9	71.6	-	71.2	71.3
	1956-57	-	0.1	93.9	81.0	82.1	-	77.9	78.0
	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	72.6
<i>Hump-backs</i>	1938-39	9.8	4.5	1.9	0.6	-	-	2.4	2.4
	1951-52	-	-	-	11.5	-	-	4.7	4.8
	1952-53	-	0.1	-	9.6	2.1	-	3.4	3.4
	1953-54	-	-	-	5.7	-	-	1.9	1.9
	1954-55	-	0.1	-	4.3	-	-	1.5	1.4
	1955-56	-	0.1	-	9.6	-	-	4.0	4.0
	1956-57	-	-	-	4.8	-	-	2.1	2.0
	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
<i>Sei-whales</i>	1938-39	-	-	-	-	0.1	-	-	-
	1951-52	-	-	0.1	0.2	0.1	-	0.1	0.1
	1952-53	-	-	-	0.2	-	-	0.4	0.4
	1953-54	-	-	0.5	1.4	0.7	-	0.8	0.8
	1954-55	-	-	0.1	0.8	0.7	-	0.4	0.4
	1955-56	-	-	0.1	1.4	3.3	-	0.8	0.8
	1956-57	-	-	0.7	3.1	4.8	-	2.2	2.2
	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	8.9
<i>Sperm-whales</i>	1938-39	23.1	9.3	4.2	5.0	6.5	-	6.7	6.7
	1951-52	100.0	99.9	2.5	2.7	4.2	-	16.5	16.4
	1952-53	96.9	99.1	1.7	1.6	7.0	-	7.7	7.7
	1953-54	100.0	99.4	2.3	1.9	3.3	-	8.7	8.7
	1954-55	100.0	99.8	8.3	2.9	6.3	-	16.6	16.6
	1955-56	100.0	99.9	7.7	3.9	19.4	-	19.4	19.4
	1956-57	100.0	99.9	5.4	2.7	5.2	-	13.2	13.2
	1957-58	100.0	99.8	5.6	4.5	2.8	-	17.6	17.5
	1958-59	100.0	99.8	4.8	3.3	3.0	-	15.0	15.0
	1959-60	99.4	57.1	3.0	4.4	4.2	8.4	11.4	11.4

The pelagic expeditions processed in 1959–60 15,433.0 blue-whale units, from which were produced 1,859,375 barrels whale-oil. From 4,138 sperm-whales processed, there were produced 191,517 barrels sperm-oil.

The total whaling results in the Antarctic from 1919–20 up to and including 1959–60 are given in table *c*, page 12. In table *d*, page 13, the results of the *pelagic* whaling during the same period have been recorded separately.

As will be seen from table *d* a total of 1,230 blue-whales were killed in 1959–60 by the pelagic expeditions, as compared with 1,191 in 1958–59. The catch of fin-whales amounted to 26,415, which is the largest number of fin-whales killed in the pelagic whaling apart from the season 1937–38 when 26,457 fin-whales were killed. There were also killed 1,338 humpbacks, as compared with 2,394 in the season 1958–59 and 396 in the season 1957–58. The sei-whale catch during the season 1959–60 amounted to 3,234 animals, which is the highest number ever recorded in the pelagic whaling. The sperm-whale catch amounted to 4,138 animals or 1,299 less than in the previous season.

Table *e*, page 15, gives a survey for a series of years of the average total and average daily production of whale oil per floating factory and per catcher. This table also includes data showing the average number of baleen whales killed per catcher's day's work. When judging the whaling results on the basis of these figures, attention must be drawn to the variation in the number of floating factories and catchers employed, and to the considerable increase in the capacity of the whaling matériel in the post-war years.

It will appear from this table that the average daily production per floating factory and per catcher was very low during the season 1959–60 – viz. 942 barrels per floating factory, compared to 1,299 and 1,336 barrels during the two preceding seasons. The result in 1959–60 is the lowest recorded in post-war years, although the whaling matériel in this season was more effective than ever.

Table *f*, page 16, illustrates the relation between the various species of whales killed in pelagic operations in the Antarctic from 1928–29. In the season 1959–60 3.4 per cent of the total number of whales killed were blue-whales as against 3.3 and 4.7 per cent during the two preceding seasons. The fin-whale catch in 1959–60 represented 72.6 per cent of the total catch against 71.2 per cent in 1958–59 and 70.1 per cent in 1957–58. The number of humpbacks killed represented 3.7 per cent of the total catch during the last season against 6.6 per cent in 1958–59 and 1.1 per cent in 1957–58. The sei-whale catch represented 8.9 per cent in 1959–60 against 3.9 and 6.6 per cent in the two preceding seasons. These percentage figures are, however, influenced by the sperm-whale catch, which has varied considerably during the latest seasons. In 1959–60 11.4 per cent

of the total catch consisted of sperm-whales, while the corresponding percentage figures for the 6 previous seasons varied between 19.4 and 8.7 per cent.

In the survey below is stated the number of blue- and fin-whales killed and the correlation between the catch of these two most important species of baleen whales during a number of seasons.

During the seasons previous to 1937-38 the predominant species of the baleen whales taken in Antarctic waters were blue-whales. During the seasons 1930-31 and 1932-33 about 80 per cent of the total blue-and fin-whale catch were blue-whales, whereas the number of blue-whales killed

Season	Blue-whales		Fin-whales	
	Number	Per cent	Number	Per cent
1930-31	28,325	76.7	8,601	23.3
1932-33	18,624	80.7	4,441	19.3
1936-37	14,183	51.6	13,302	48.4
1937-38	14,826	35.9	26,457	64.1
1938-39	13,849	41.6	19,477	58.4
1947-48	6,862	26.5	18,999	73.5
1948-49	7,399	30.1	17,201	69.9
1949-50	6,168	25.5	18,061	74.5
1950-51	6,966	28.5	17,474	71.5
1951-52	5,124	20.0	20,520	80.0
1952-53	3,866	15.4	21,197	84.6
1953-54	2,684	9.7	24,986	90.3
1954-55	2,163	7.7	25,878	92.3
1955-56	1,611	6.0	25,289	94.0
1956-57	1,505	5.5	25,700	94.5
1957-58	1,684	6.3	25,222	93.7
1958-59	1,191	4.4	25,837	95.6
1959-60	1,230	4.4	26,415	95.6

during the 2 last seasons represented only about 4 per cent of the total blue- and fin-whale catch. The figures in the survey above do not give a correct picture of the presence of blue-whales at previous and present times. It will appear from the statistics of previous years recorded for pelagic whaling in the Antarctic that the blue-whales occur most frequently during the Antarctic spring months, i.e. October, November and December. Later in the season the fin-whale is more abundant. In order to obtain a larger oil output, the opening day of the pelagic season has gradually been postponed ever since the early thirties. During post-war seasons the efforts of reducing the taxation of blue-whales have also contributed to this postponement of the whaling period. In the five last seasons, 1955/56-1959/60,

Table i.—Average size of whales killed in the Antarctic, by whaling grounds and species of whales 1938/39 and 1949/50—1959/60.

Whaling grounds and species of whales.	1938-39	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
<b>Pelagic whaling.</b>	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.
<i>Blue-whales.</i>												
Males .....	76.6	77.7	77.3	76.4	75.8	76.0	75.7	75.6	75.8	75.4	76.0	74.5
Females .....	79.5	80.7	79.4	79.5	79.1	79.6	79.5	78.9	78.4	79.0	80.2	77.0
Total animals .....	78.0	79.0	78.2	78.0	77.5	78.0	77.8	77.3	77.0	77.1	78.3	75.9
<i>Fin-whales.</i>												
Males .....	65.7	66.0	65.2	66.4	65.7	65.6	65.1	65.1	65.3	64.7	64.8	65.0
Females .....	68.9	69.1	68.2	69.4	68.8	68.7	68.0	68.1	68.6	67.7	67.8	68.1
Total animals .....	67.2	67.5	66.6	67.9	67.3	67.1	66.5	66.5	66.9	66.2	66.3	66.6
<i>Humpbacks.</i>												
Males .....	37.7	39.7	39.7	39.3	39.5	39.6	39.9	39.0	40.7	40.8	39.2	39.8
Females .....	40.5	41.4	41.6	41.4	42.0	41.1	41.8	40.7	42.1	42.1	40.7	41.8
Total animals .....	39.6	40.6	40.8	40.4	40.9	40.3	41.1	40.0	41.4	41.5	40.0	40.9
<i>Sei-whales.</i>												
Males .....	49.3	49.3	48.1	49.9	49.6	47.0	44.9	48.5	48.7	48.3	48.8	48.7
Females .....	56.0	51.7	51.2	51.9	52.3	50.8	47.9	51.3	51.3	51.3	51.4	51.3
Total animals .....	51.0	51.1	49.7	51.0	51.6	49.2	46.5	50.4	50.4	50.3	50.8	50.5
<i>Sperm-whales.</i>												
Males .....	52.8	50.1	50.2	49.9	49.9	49.2	48.9	48.4	48.7	47.5	47.2	47.3
Females .....	—	—	—	—	—	—	—	—	—	36.5	—	39.0
Total animals .....	52.8	50.1	50.2	49.9	49.9	49.2	48.9	48.4	48.7	47.5	47.2	47.3
<b>South Georgia.</b>												
<i>Blue-whales, total</i> ...	75.8	74.3	76.9	72.0	74.0	73.3	73.0	81.3	71.7	74.5	64.0	73.0
<i>Fin-whales, total</i> ...	65.4	65.2	66.0	66.0	65.4	64.0	64.8	65.0	63.8	66.1	65.9	66.4
<i>Humpbacks, total</i> ...	—	40.0	40.1	39.8	40.1	39.4	40.0	—	—	—	—	—
<i>Sei-whales, total</i> ...	50.9	50.0	50.3	50.5	50.1	49.3	50.0	50.0	49.5	50.1	49.8	49.5
<i>Sperm-whales, total</i> ..	50.3	48.6	46.9	48.1	46.7	47.0	48.7	46.8	45.7	47.1	46.5	47.6

the opening day of the blue-whale season was February 1st, while the blue-whale catch in 1932-33 commenced on October 20th.

In tables *g* and *h*, pages 17 and 18, the monthly catch of the various species of whales is recorded in absolute and percentage figures for a series of years. These figures show that the blue-whale catch in each month during the post-war seasons has represented an ever smaller part of the total catch. Most of the figures are, however, to a great extent influenced by the above mentioned postponement and curtailment of the whaling period, viz. all the figures for the months of December and March as well as the January figures for the seasons from and including 1953-54. Only the month of January during the seasons up to and including 1952-53 and the month of February during all seasons have been unaffected by the postponement of the whaling period, but also here the percentage figures for the blue-whale catch show a marked decrease.

The survey on next page gives a more correct basis of comparison between the blue-whale catch of later and previous years, showing the

**Table j.—Average size of whales killed, by species and sex 1938/39 and 1949/50—1959/60, excl. of blue-whales less than 70', fin-whales less than 60' and humpbacks less than 35'. Antarctic, pelagic whaling.**

Species of whales.	1938 -39	1949 -50	1950 -51	1951 -52	1952 -53	1953 -54	1954 -55	1955 -56	1956 -57	1957 -58	1958 -59	1959 -60
<i>Blue-whales.</i>	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.	Engl. feet.
Males . . . . .	77.3	78.2	77.8	77.1	76.3	76.4	76.1	76.1	76.3	75.8	76.3	74.9
Females . . . . .	80.3	81.3	80.0	80.1	79.5	80.1	80.0	79.4	79.0	79.4	80.6	77.5
Total animals.	78.8	79.6	78.8	78.6	78.0	78.5	78.2	77.9	77.5	77.6	78.7	76.3
<i>Fin-whales.</i>												
Males . . . . .	66.5	66.7	66.3	66.7	66.0	65.9	65.9	65.2	66.2	65.8	65.9	66.1
Females . . . . .	69.8	70.0	69.3	69.7	69.1	69.0	68.9	68.3	69.6	69.0	69.0	69.3
Total animals.	68.1	68.3	67.8	68.1	67.6	67.4	67.4	66.7	67.9	67.5	67.4	67.8
<i>Humpbacks.</i>												
Males . . . . .	38.1	40.1	40.1	39.6	39.7	39.7	40.0	39.1	40.8	40.9	39.2	39.9
Females . . . . .	40.8	41.8	41.8	41.7	42.2	41.3	41.9	40.8	42.3	42.3	40.9	41.9
Total animals.	40.0	41.0	41.1	40.7	41.1	40.5	41.1	40.1	41.6	41.6	40.1	41.1

percentage proportion of blue-whales in relation to the total blue- and fin-whale catch during the period February 1st (incl.)—March 4th (incl.) for each season since 1931–32. During the said period whaling operations have been carried on at full capacity throughout all the seasons.

Season	Blue-whales in per cent of all blue- and fin-whales killed Febr. 1st—March 4th	Season	Blue-whales in per cent of all blue- and fin-whales killed Febr. 1st—March 4th
1931–32	61.9	1948–49	25.2
1932–33	50.3	1949–50	25.7
1933–34	46.6	1950–51	28.7
1934–35	38.4	1951–52	25.9
1935–36	50.8	1952–53	14.0
1936–37	29.9	1953–54	14.0
1937–38	16.5	1954–55	9.5
1938–39	24.5	1955–56	11.5
1945–46	31.9	1956–57	9.4
1946–47	31.9	1957–58	13.5
1947–48	22.9	1958–59	7.8
		1959–60	5.7

While the percentage proportion of blue-whales in relation to the total blue- and fin-whale catch varied between 31.9 per cent and 22.9 per cent during the post-war seasons until and including 1951–52, there has been a strongly reduced blue-whale catch during the latest seasons. In 1959–60 the percentage proportion of blue-whales reached a minimum figure of 5.7.

Table k.—Antarctic, pelagic whaling. Catch of immature and mature whales 1938/39 and 1951/52—1959/60.

	1938—39.		1951—52.		1952—53.		1953—54.		1954—55.		1955—56.		1956—57.		1957—58.		1958—59.		1959—60.	
	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.	Number of whales.	Per cent.
<b>Blue-whales.</b>																				
Immature																				
males . . . .	1,940	27.8	778	31.7	677	36.8	409	33.5	374	37.4	289	37.4	268	33.7	316	36.9	175	33.0	267	46.5
females . . .	2,343	34.1	1,015	38.4	827	41.2	564	39.0	439	38.0	352	42.0	312	44.0	332	40.2	219	33.3	351	56.7
animals . . .	4,283	30.9	1,793	35.1	1,504	39.1	973	36.5	813	37.7	641	39.8	580	38.5	648	38.5	394	33.2	618	50.3
Mature																				
males . . . .	5,034	72.2	1,680	68.3	1,165	63.2	811	66.5	626	62.6	484	62.6	528	66.3	541	63.1	355	67.0	307	53.5
females . . .	4,522	65.9	1,628	61.6	1,178	58.8	883	61.0	715	62.0	486	58.0	397	56.0	494	59.8	438	66.7	303	43.3
animals . . .	9,556	69.1	3,308	64.9	2,343	60.9	1,694	63.5	1,341	62.3	970	60.2	925	61.5	1,035	61.5	793	66.8	610	49.7
<b>Fin-whales.</b>																				
Immature																				
males . . . .	2,097	20.2	1,495	14.2	2,151	20.6	2,593	20.4	3,348	26.3	3,169	24.7	3,089	23.9	3,629	30.0	3,654	28.9	3,445	27.0
females . . .	2,039	22.4	1,867	19.1	2,486	23.6	2,802	23.4	3,645	28.2	3,269	26.7	3,281	26.1	4,052	31.3	4,041	31.0	3,816	28.2
animals . . .	4,136	21.2	3,362	16.6	4,637	22.1	5,395	21.9	6,993	27.3	6,438	25.7	6,370	25.0	7,681	30.6	7,695	30.0	7,261	27.6
Mature																				
males . . . .	8,297	79.8	9,025	85.8	8,296	79.4	10,106	79.6	9,358	73.7	9,688	75.3	9,835	76.1	8,484	70.0	8,976	71.1	9,290	73.0
females . . .	7,044	77.6	7,925	80.9	8,031	76.4	9,174	76.6	9,257	71.8	8,976	73.3	9,297	73.9	8,902	68.7	9,016	69.0	9,720	71.8
animals . . .	15,341	78.8	16,950	83.4	16,327	77.9	19,280	78.1	18,615	72.7	18,664	74.3	19,132	75.0	17,386	69.4	17,992	70.0	19,010	72.4
<b>Humpbacks.</b>																				
Immature																				
males . . . .	182	69.2	347	48.9	207	50.7	159	52.1	87	43.5	341	56.9	85	26.1	58	30.9	658	57.2	271	47.7
females . . .	310	50.0	330	40.1	183	34.3	132	45.8	107	36.6	392	47.5	102	29.4	63	30.3	607	48.8	287	37.6
animals . . .	492	55.7	677	44.2	390	41.4	291	49.1	194	39.4	733	51.4	187	27.8	121	30.6	1,265	52.9	558	41.9
Mature																				
males . . . .	81	30.8	363	51.1	201	49.3	146	47.9	113	56.5	258	43.1	241	73.9	130	69.1	492	42.8	297	52.3
females . . .	310	50.0	492	59.9	350	65.7	156	54.2	185	63.4	434	52.5	245	70.6	145	69.7	636	51.2	477	62.4
animals . . .	391	44.3	855	55.8	551	58.6	302	50.9	298	60.6	692	48.6	486	72.2	275	69.4	1,128	47.1	774	58.1



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	1931/32-1937/38	<sup>1)</sup> 17,210	16.7	79.0	48,125	46.8	78.4	37,210	36.2	80.2
2	1938-39	3,450	25.0	79.0	4,455	32.2	77.0	4,915	35.5	77.9
3	1939-40	3,441	61.9	78.2	734	13.2	76.8	1,386	24.9	78.7
4	1940/41-1945/46	2,705	46.4	78.0	3,131	53.6	78.3	-	-	-
5	1946-47	1,857	21.0	78.6	2,968	33.5	78.4	3,346	37.7	78.1
6	1947-48	1,536	22.5	76.7	1,890	27.6	78.6	1,952	28.5	79.4
7	1948-49	2,022	27.4	78.6	2,981	40.4	79.3	1,325	18.0	79.1
8	1949-50	1,064	17.3	78.4	1,512	24.7	78.5	925	15.1	78.9
9	1950-51	1,514	21.9	77.3	1,427	20.6	77.8	1,076	15.5	77.7
10	1951-52	447	8.8	78.2	1,836	36.0	79.2	1,199	23.5	77.7
11	1952-53	727	18.9	78.9	1,454	37.8	77.7	837	21.8	77.0
12	1953-54	542	20.3	78.1	1,569	58.8	78.2	356	13.4	77.2
13	1954-55	470	21.8	79.0	685	31.8	78.1	310	14.4	77.6
14	1955-56	439	27.3	77.1	300	18.6	78.8	322	20.0	77.7
15	1956-57	330	21.9	76.9	275	18.3	78.4	80	5.3	78.5
16	1957-58	236	14.0	77.8	620	36.9	77.4	186	11.1	76.7
17	1958-59	57	4.8	80.5	373	31.4	79.0	335	28.2	78.0
18	1959-60	58	4.7	79.2	231	18.8	77.4	403	32.8	73.3
	1931/32-1959/60	38,105	20.6	78.6	74,566	40.3	78.4	56,163	30.3	79.5
<b>Fin-whales.</b>										
1	1931/32-1937/38	<sup>2)</sup> 25,959	36.3	67.8	31,251	43.6	67.7	14,373	20.1	68.7
2	1938-39	6,188	31.8	67.4	5,710	29.3	66.4	5,540	28.5	67.5
3	1939-40	7,840	73.7	67.4	2,218	20.9	66.9	574	5.4	67.5
4	1940/41-1945/46	6,940	70.9	67.4	2,849	29.1	67.1	-	-	-
5	1946-47	4,655	36.2	66.7	4,382	34.0	68.5	3,355	26.1	67.3
6	1947-48	6,136	32.5	68.1	6,483	34.4	67.8	4,654	24.7	67.9
7	1948-49	4,995	29.2	67.4	6,457	37.8	68.5	3,068	18.0	67.4
8	1949-50	7,150	40.0	67.5	5,117	28.6	67.5	2,940	16.5	66.6
9	1950-51	5,081	29.4	66.4	4,133	23.9	66.2	4,210	24.3	66.5
10	1951-52	5,977	29.4	67.9	7,122	35.1	68.1	2,141	10.5	67.3
11	1952-53	4,551	21.7	68.1	11,364	54.2	67.1	1,449	6.9	66.2
12	1953-54	7,653	31.0	67.4	11,459	46.4	67.0	2,195	8.9	67.0
13	1954-55	4,963	19.4	67.3	13,607	53.1	66.4	2,790	10.9	66.4
14	1955-56	6,619	26.4	66.2	7,088	28.2	66.8	3,208	12.8	66.5
15	1956-57	10,697	41.9	67.4	3,812	15.0	67.2	291	1.1	64.6
16	1957-58	5,211	20.8	67.3	9,197	36.7	66.7	3,579	14.3	65.6
17	1958-59	4,298	16.7	67.1	9,385	36.6	66.4	7,277	28.3	66.5
18	1959-60	4,920	18.7	66.9	9,307	35.4	66.7	6,501	24.8	66.3
	1931/32-1959/60	129,833	31.3	67.4	150,941	36.4	67.2	68,145	16.4	67.2
<b>Humpbacks.</b>										
1	1931/32-1937/38	<sup>3)</sup> 1,057	8.4	41.0	6,209	49.1	40.8	5,384	42.5	40.7
2	1938-39	-	-	-	-	-	-	859	97.3	39.6
3	1940-41	231	82.8	42.6	48	17.2	41.2	-	-	-
4	1946/47-1948/49	6	37.5	44.0	9	56.3	41.7	1	6.2	45.0
5	1949-50	172	8.2	41.0	251	11.9	41.7	779	37.0	40.4
6	1950-51	2	0.1	38.5	20	1.2	38.8	1,112	68.5	40.5
7	1951-52	33	2.2	42.9	189	12.3	42.0	1,127	73.6	39.9
8	1952-53	14	1.5	44.6	218	23.2	41.2	191	20.3	39.1
9	1953-54	13	2.2	41.2	172	29.0	41.0	258	43.5	39.3
10	1954-55	2	0.4	42.5	142	28.9	41.4	-	-	-
11	1955-56	-	-	-	64	4.5	41.1	824	57.8	39.8
12	1956-57	-	-	-	8	1.2	40.8	-	-	-
13	1957-58	-	-	-	116	29.3	41.0	-	-	-
14	1958-59	-	-	-	95	4.0	42.4	1,796	75.0	39.6
15	1959-60	-	-	-	156	11.7	41.5	66	5.0	39.6
	1931/32-1959/60	1,530	5.6	41.3	7,697	28.2	40.9	12,397	45.3	40.3

<sup>1)</sup> Incl. 608 blue-whales, length not stated. <sup>2)</sup> Incl. 198 fin-whales, length not stated. <sup>3)</sup> Incl. 2 humpbacks,

## 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.		
311	0.3	80.5	1	—	82.0	6	—	74.8	102,863	100	79.2	102,950	1
1,015	7.3	79.7	—	—	—	4	—	70.0	13,839	100	78.0	13,849	2
—	—	—	—	—	—	—	—	—	5,561	100	78.2	11,392	3
—	—	—	—	—	—	—	—	—	5,836	100	78.1	9,687	4
693	7.8	77.6	—	—	—	—	—	—	8,864	100	78.3	8,865	5
1,467	21.4	78.7	—	—	—	—	—	—	6,845	100	78.4	6,862	6
1,013	13.8	79.1	30	0.4	80.9	—	—	—	7,371	100	79.1	7,399	7
1,494	24.4	79.8	1,137	18.5	79.4	—	—	—	6,132	100	79.0	6,168	8
2,211	31.9	79.3	655	9.5	78.8	45	0.6	77.7	6,928	100	78.2	6,966	9
1,462	28.6	76.9	157	3.1	77.5	—	—	—	5,101	100	78.0	5,124	10
512	13.3	76.4	317	8.2	76.9	—	—	—	3,847	100	77.5	3,866	11
83	3.1	78.2	117	4.4	76.7	—	—	—	2,667	100	78.0	2,684	12
561	26.0	76.4	128	6.0	77.0	—	—	—	2,154	100	77.8	2,163	13
15	0.9	79.1	281	17.4	76.2	254	15.8	76.3	1,611	100	77.3	1,611	14
—	—	—	617	41.0	76.3	203	13.5	76.9	1,505	100	77.0	1,505	15
76	4.5	76.9	440	26.1	76.9	125	7.4	76.1	1,683	100	77.1	1,684	16
176	14.9	78.5	246	20.7	76.9	—	—	—	1,187	100	78.3	1,191	17
391	31.8	76.6	127	10.4	76.9	18	1.5	78.7	1,228	100	75.9	1,230	18
11,480	6.2	78.5	4,252	2.3	77.8	655	0.3	76.5	185,221	100	78.7	195,196	
18	—	69.6	—	—	—	13	—	65.5	71,614	100	67.9	71,649	1
1,975	10.1	68.1	—	—	—	64	0.3	64.5	19,477	100	67.2	19,477	2
—	—	—	—	—	—	—	—	—	10,632	100	67.3	17,757	3
—	—	—	—	—	—	—	—	—	9,789	100	67.3	16,018	4
478	3.7	65.9	—	—	—	—	—	—	12,870	100	67.4	12,877	5
1,591	8.4	67.9	—	—	—	—	—	—	18,864	100	67.9	18,999	6
2,489	14.6	68.2	72	0.4	68.4	—	—	—	17,981	100	67.9	17,201	7
1,664	9.3	67.6	1,005	5.6	69.0	—	—	—	17,876	100	67.5	18,061	8
2,198	12.7	67.4	1,212	7.0	68.2	492	2.7	68.5	17,296	100	66.6	17,474	9
2,768	13.6	67.9	2,304	11.4	67.6	—	—	—	20,312	100	67.9	20,520	10
1,709	8.2	66.8	1,891	9.0	67.7	—	—	—	20,964	100	67.3	21,197	11
654	2.7	66.9	2,616	10.6	66.8	98	0.4	66.6	24,675	100	67.1	24,986	12
3,021	11.8	66.0	1,227	4.8	66.4	—	—	—	25,608	100	66.5	25,878	13
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	14
23	0.1	65.0	5,064	19.9	65.9	5,615	22.0	66.8	25,502	100	66.9	25,700	15
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	16
2,625	10.2	65.6	2,102	8.2	64.6	—	—	—	25,687	100	66.3	25,837	17
4,730	18.0	66.8	401	1.5	65.1	412	1.6	64.5	26,271	100	66.6	26,415	18
28,567	6.9	66.9	24,586	5.9	66.3	12,615	3.1	66.7	414,687	100	67.2	430,557	
4	—	43.0	—	—	—	—	—	—	12,654	100	40.8	12,665	1
24	2.7	39.8	—	—	—	—	—	—	883	100	39.6	883	2
—	—	—	—	—	—	—	—	—	279	100	42.4	2,675	3
—	—	—	—	—	—	—	—	—	16	100	42.8	16	4
903	42.9	40.5	—	—	—	—	—	—	2,105	100	40.6	2,117	5
162	10.0	42.0	66	4.1	41.2	262	16.1	41.5	1,624	100	40.8	1,630	6
146	9.5	41.6	37	2.4	41.7	—	—	—	1,532	100	40.4	1,546	7
505	53.6	41.3	13	1.4	45.3	—	—	—	941	100	40.9	954	8
14	2.4	42.7	136	22.9	41.2	—	—	—	593	100	40.3	594	9
171	34.8	39.8	177	35.9	41.9	—	—	—	492	100	41.1	493	10
194	13.6	39.4	329	23.1	40.3	14	1.0	43.3	1,425	100	40.0	1,432	11
—	—	—	10	1.5	42.3	655	97.3	41.4	673	100	41.4	679	12
23	5.8	41.0	167	42.2	41.8	90	22.7	41.9	396	100	41.5	396	13
502	21.0	40.7	—	—	—	—	—	—	2,393	100	40.0	2,394	14
931	69.9	40.8	—	—	—	179	13.4	41.8	1,332	100	40.9	1,338	15
3,579	13.1	40.7	935	3.4	41.2	1,200	4.4	41.6	27,338	100	40.6	29,814	

length not stated. \*) 2 humpbacks caught in the season 1939/40 are included.

*Average size of the whales killed.*

The average size of blue-whales, fin-whales and humpbacks killed in the pelagic whaling and off South Georgia has been specified for the post-war seasons in table *i*, page 21. It will appear from this table that the average size of blue-whales killed decreased by 2.4 feet, to 75.9 feet during the last season as compared with the preceding season. The average size of fin-whales killed increased by 0.3 feet, to 66.6 feet. During all the seasons 1954/55–1959/60 the average size of the fin-whales killed has varied between 66.2 and 66.9 feet. The average size of sperm-whales killed has constantly decreased, from 52.8 feet in 1938–39 to 47.3 feet in 1959–60.

For the seasons covered by table *i* the minimum length settled for blue-whales and humpbacks has been 70 ft. and 35 ft. respectively. The minimum length settled for fin-whales was 55 feet until and including the season 1950–51, during the 3 successive seasons 60 ft. and during the last 6 seasons 57 ft. In order to eliminate the possible influence which a variation in the legal size and in the number of undersized whales killed might have on the average size, table *j*, on page 22, has been prepared. This table records the average size of blue-whales of 70 ft. and over, fin-whales of 60 ft. and over, and humpbacks of 25 ft. and over. The average size of blue-whales (of 70 ft. and over) killed during the last season was 76.3 ft. against 78.7 ft. in 1958–59. The average size of the fin-whales (of 60 ft. and over) was 0.4 ft. higher than the average for the season 1958–59. For humpbacks (of 35 ft. and over) the average size was 41.1 ft. against 40.1 ft. in 1958–59.

The average size of blue- and fin-whales killed in the different areas during the last three seasons were as follows:

Areas <sup>1)</sup>	Average size of blue-whales			Average size of fin-whales		
	1957-58 Engl. ft.	1958-59 Engl. ft.	1959-60 Engl. ft.	1957-58 Engl. ft.	1958-59 Engl. ft.	1959-60 Engl. ft.
II.....	77.8	80.5	79.2	67.3	67.1	66.9
III.....	77.4	79.0	77.4	66.7	66.4	66.7
IV.....	76.7	78.0	73.3	65.5	66.5	66.3
V.....	76.9	78.5	76.6	64.4	65.6	66.8
VI.....	76.9	76.9	76.9	65.1	64.6	65.1
I.....	76.1	—	78.7	66.1	—	64.5
Total.....	77.1	78.3	75.9	66.2	66.3	66.6

<sup>1)</sup> The different areas, see page 35.

In Area IV the average size of blue-whales killed in 1959–60 was as low as 73.3 feet, which is 4.7 feet lower than in the season 1958–59.

Table m.—Number of whales killed during the seasons 1931/32—1959/60.

— 1 —

Areas	Blue-whales		Fin-whales		Humpbacks		Sperm-whales		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
II.....	38,105	20.6	129,833	31.3	1,530	5.6	13,113	20.3	182,581	26.4
III.....	74,566	40.3	150,941	36.4	7,697	28.2	24,298	37.5	257,502	37.2
IV.....	56,163	30.3	68,145	16.4	12,397	45.3	14,983	23.1	151,688	21.9
V.....	11,480	6.2	28,567	6.9	3,579	13.1	8,653	13.4	52,279	7.6
VI.....	4,252	2.3	24,586	5.9	935	3.4	2,084	3.2	31,857	4.6
I.....	655	0.3	12,615	3.1	1,200	4.4	1,625	2.5	16,095	2.3
Total.....	185,221	100.0	414,687	100.0	27,338	100.0	64,756	100.0	692,002	100.0

— 2 —

Species of whales	Area II		Area III		Area IV		Area V		Area VI		Area I		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.....	38,105	20.9	74,566	29.0	56,163	37.0	11,480	22.0	4,252	13.4	655	4.1	185,221	26.8
Fin.....	129,833	71.1	150,941	58.6	68,145	44.9	28,567	54.6	24,586	77.2	12,615	78.4	414,687	59.9
Humpback	1,530	0.8	7,697	3.0	12,397	8.2	3,579	6.8	935	2.9	1,200	7.4	27,338	4.0
Sperm....	13,113	7.2	24,298	9.4	14,983	9.9	8,653	16.6	2,084	6.5	1,625	10.1	64,756	9.3
Total.....	182,581	100.0	257,502	100.0	151,688	100.0	52,279	100.0	31,857	100.0	16,095	100.0	692,002	100.0

*Mature and immature whales.*

Table *k*, page 23, gives particulars of the catch of mature and immature whales in absolute and relative figures during a series of seasons.

Animals 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           —,,—

As will be seen from table *k* a very high per cent of the blue-whales killed last season were immature animals, viz. 50.3 per cent as against 33.2 and 38.5 per cent, respectively, during the seasons 1958–59 and 1957–58. Of the fin-whales killed 27.6 per cent were immature animals as compared with 30 per cent in the preceding season.

Table n.—Antarctic, pelagic whaling results for the various countries 1937/38, 1938/39 and 1949/50—1959/60.

Seasons	All countries			Norway			United Kingdom			Union of South Africa			Japan		
	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed
1937-38.....	44,152	Barrels <sup>1</sup> 3,250,064	244	<sup>2)</sup> 14,960	Barrels <sup>3)</sup> 1,157,993	83	12,461	Barrels 921,192	64	2,825	Barrels 193,673	16	5,582	Barrels 388,683	30
1938-39.....	36,681	2,709,281	270	<sup>2)</sup> 11,521	<sup>3)</sup> 842,712	90	9,371	746,182	65	1,170	100,945	9	7,540	483,476	49
1949-50.....	29,017	2,019,368	216	15,556	1,048,432	119	6,596	470,699	41	1,882	145,298	15	2,114	168,754	16
1950-51.....	31,180	2,152,498	239	15,873	1,062,260	124	5,177	417,755	43	2,541	161,911	15	2,741	170,596	18
1951-52.....	32,575	2,334,805	268	14,763	1,088,085	132	5,961	446,262	45	2,494	185,962	16	3,831	259,476	32
1952-53.....	28,325	1,998,094	230	10,381	767,960	95	6,173	449,215	46	2,460	150,455	16	2,645	207,335	30
1953-54.....	31,218	2,100,884	206	13,632	963,085	100	6,345	471,138	40	2,226	147,271	13	4,218	252,677	26
1954-55.....	34,388	2,061,789	233	13,428	809,488	101	6,656	400,870	40	1,696	99,809	13	5,958	366,915	36
1955-56.....	35,531	2,134,808	257	13,371	788,554	110	6,346	409,701	44	2,184	109,539	15	6,462	408,853	40
1956-57.....	32,987	2,098,854	225	14,008	955,599	94	5,281	333,967	35	1,596	86,586	10	8,093	492,507	54
1957-58.....	36,490	2,146,206	237	13,289	853,810	94	5,534	323,472	37	-	-	-	11,763	627,849	68
1958-59.....	36,364	2,050,241	235	13,292	796,986	93	4,601	259,723	37	-	-	-	12,558	646,130	69
1959-60.....	36,559	2,050,892	220	10,656	655,033	70	4,432	257,368	31	-	-	-	12,359	617,141	69

Seasons	Germany			Panama			United States of America			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	Number of whales killed	Oil production	Catchers employed	Number of whales killed	Oil production	Catchers employed
1937-38.....	5,237	Barrels 356,858	33	1,527	Barrels 117,610	10	1,560	Barrels 114,015	8	-	Barrels -	-	-	Barrels -	-
1938-39.....	5,066	374,149	41	907	68,853	8	1,106	92,964	8	-	-	-	-	-	-
1949-50.....	-	-	-	-	-	-	-	-	-	1,295	82,792	11	1,574	103,393	12
1950-51.....	-	-	-	1,497	126,522	12	-	-	-	1,660	103,560	12	1,691	109,894	15
1951-52.....	-	-	-	1,408	97,073	16	-	-	-	1,650	110,300	12	2,468	147,647	15
1952-53.....	-	-	-	2,365	164,150	16	-	-	-	1,575	103,710	12	2,726	155,269	15
1953-54.....	-	-	-	-	-	-	-	-	-	1,711	97,596	12	3,086	169,117	15
1954-55.....	-	-	-	2,512	147,880	16	-	-	-	848	64,739	12	3,290	172,088	15
1955-56.....	-	-	-	2,730	160,960	15	-	-	-	1,665	103,465	18	2,773	153,736	15
1956-57.....	-	-	-	-	-	-	-	-	-	1,409	92,489	14	2,600	137,706	18
1957-58.....	-	-	-	-	-	-	-	-	-	1,867	116,497	14	4,037	224,578	24
1958-59.....	-	-	-	-	-	-	-	-	-	2,226	126,488	12	3,687	220,914	24
1959-60.....	-	-	-	-	-	-	-	-	-	2,081	143,050	13	7,031	378,300	37

<sup>1)</sup> Barrel = 170 kg. (Barrel = abt. 1/6 long ton. 1 long ton = 1,016 kg.) <sup>2)</sup> Including the catch of two Norwegian expeditions hired by Germany in 1937-38 2,158 whales and in 1938-39 1,658 whales. <sup>3)</sup> Incl. the production of two Norwegian expeditions hired by Germany—in 1937-38 180,750 barrels and in 1938-39 118,380 barrels.

Table o.—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.	
								Barrels				
1919-20	987	1,673	79	71	8	<sup>1)</sup> 14	2,832	147,029	6	—	26	109
1920-21	856	2,643	103	36	31	<sup>1)</sup> 13	3,682	177,137	5	—	21	175
1921-22	2,570	710	9	103	3	—	3,395	249,042	5	—	20	170
1922-23	3,569	1,445	320	10	19	—	5,363	347,553	5	1	23	233
1923-24	1,927	1,378	130	191	49	—	3,675	247,463	5	1	23	160
1924-25	3,512	2,019	262	1	24	—	5,818	406,176	5	1	24	242
1925-26	1,855	5,709	236	13	12	—	7,825	404,457	5	1	23	340
1926-27	3,689	1,144	—	365	17	—	5,215	417,292	5	1	23	227
1927-28	2,125	1,357	—	95	60	—	3,637	303,480	5	1	23	158
1928-29	1,560	3,130	15	396	31	—	5,132	348,629	5	1	23	223
1929-30	488	3,396	46	216	39	<sup>1)</sup> 1	4,186	247,963	5	—	27	155
1930-31	1,085	1,416	66	144	24	<sup>1)</sup> 1	2,736	187,938	5	—	27	101
1931-32	438	1,735	6	16	10	—	2,205	122,205	2	—	12	184
1932-33	267	727	—	2	—	—	996	54,583	1	—	6	166
1933-34	536	1,728	92	—	7	—	2,363	132,187	2	—	12	197
1934-35	556	836	37	125	21	—	1,575	108,141	2	—	10	158
1935-36	1,221	520	41	—	3	—	1,785	143,185	2	—	10	179
1936-37	121	1,079	17	471	70	—	1,758	81,629	2	—	12	147
1937-38	97	1,552	40	155	43	—	1,887	90,266	2	—	12	157
1938-39	232	1,307	—	19	117	—	1,675	111,490	2	—	11	152
1939-40	88	937	—	80	85	<sup>1)</sup> 1	1,191	64,782	2	—	12	99
1940-41	7	747	—	88	26	—	868	44,498	1	—	5	1.4
1941-42	59	1,189	16	52	109	—	1,425	77,819	2	—	12	119
1942-43	125	776	—	73	24	—	998	50,960	1	—	6	166
1943-44	28	632	4	197	101	—	962	50,001	1	—	7	137
1944-45	128	987	60	76	45	—	1,296	75,540	1	—	7	185
1945-46	80	1,456	238	82	57	—	1,913	78,877	3	—	16	120
1946-47	327	1,670	28	391	133	<sup>2)</sup> 1	2,570	145,318	3	—	18	142
1947-48	46	2,142	24	609	128	—	2,949	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

<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."

Table p.—South Georgia. Catch by months in absolute figures.

Species of whales. Seasons.		Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	Total.	The Whal- ing Statis- tics' total figures.
<i>Total animals.</i>	1938-39.....	51	240	453	332	218	343	38	1,675	1,675
	1951-52.....	59	550	547	488	651	222	113	2,630	2,662
	1952-53.....	148	441	301	539	346	425	70	2,270	2,328
	1953-54.....	268	508	604	880	762	453	115	3,590	3,654
	1954-55.....	607	716	506	443	399	510	-	3,181	3,266
	1955-56.....	371	391	266	757	572	644	-	3,001	3,049
	1956-57.....	314	404	460	562	627	701	-	3,068	3,128
	1957-58.....	234	488	869	465	665	636	-	3,357	3,406
	1958-59.....	342	288	373	278	516	702	-	2,504	2,526
1959-60.....	345	214	253	481	654	353	-	2,300	2,333	
<i>Blue- whales.</i>	1938-39.....	-	7	131	35	24	32	3	232	232
	1951-52.....	-	2	-	-	2	2	-	6	6
	1952-53.....	-	-	1	-	-	-	3	4	4
	1953-54.....	1	1	6	4	-	1	-	3	13
	1954-55.....	1	-	7	2	2	1	-	13	13
	1955-56.....	1	-	1	-	-	1	-	13	3
	1956-57.....	2	1	1	1	1	1	-	7	7
	1957-58.....	-	1	2	-	2	1	-	6	6
	1958-59.....	-	-	-	-	1	-	-	1	1
1959-60.....	5	1	1	-	-	2	-	9	9	
<i>Fin- whales.</i>	1938-39.....	51	232	318	292	189	211	14	1,307	1,307
	1951-52.....	58	542	527	436	314	84	16	1,977	2,007
	1952-53.....	144	422	293	387	194	150	25	1,615	1,670
	1953-54.....	266	505	577	677	443	143	6	2,617	2,673
	1954-55.....	599	709	476	403	240	242	-	2,669	2,746
	1955-56.....	366	386	262	695	425	487	-	2,621	2,669
	1956-57.....	312	387	446	438	336	94	-	2,013	2,057
	1957-58.....	203	486	847	418	200	61	-	2,215	2,251
	1958-59.....	342	283	329	177	100	45	-	1,276	1,291
1959-60.....	338	211	243	261	83	7	-	1,143	1,160	
<i>Hump- backs.</i>	1938-39.....	-	-	-	-	-	-	-	-	-
	1951-52.....	-	-	9	1	-	-	-	10	10
	1952-53.....	1	4	1	-	-	3	-	9	9
	1953-54.....	-	-	2	6	1	2	-	11	11
	1954-55.....	-	2	-	-	-	-	-	2	2
	1955-56.....	-	-	-	-	-	-	-	-	-
	1956-57.....	-	-	-	-	-	-	-	-	-
	1957-58.....	-	-	-	-	-	-	-	-	-
	1958-59.....	-	-	-	-	-	-	-	-	-
1959-60.....	-	-	-	-	-	-	-	-	-	
<i>Sei- whales.</i>	1938-39.....	-	-	-	-	-	13	6	19	19
	1951-52.....	1	2	-	37	307	103	46	496	498
	1952-53.....	-	-	-	137	147	185	26	495	498
	1953-54.....	-	-	1	177	294	213	86	771	778
	1954-55.....	1	-	1	29	153	232	-	416	423
	1955-56.....	-	-	-	31	132	121	-	284	284
	1956-57.....	-	-	1	103	271	589	-	964	980
	1957-58.....	-	-	-	30	388	494	-	912	924
	1958-59.....	-	-	-	63	340	609	-	1,012	1,019
1959-60.....	-	-	4	182	539	335	-	1,060	1,075	
<i>Sperm whales.</i>	1938-39.....	-	1	4	5	5	87	15	117	117
	1951-52.....	-	4	11	14	28	33	51	141	141
	1952-53.....	3	15	6	15	5	87	16	147	147
	1953-54.....	1	2	18	16	24	94	23	178	179
	1954-55.....	6	5	22	9	4	35	-	81	82
	1955-56.....	4	5	3	31	15	35	-	93	93
	1956-57.....	-	16	12	20	19	17	-	84	84
	1957-58.....	31	1	20	17	75	80	-	224	225
	1958-59.....	-	5	49	38	75	48	-	215	215
1959-60.....	2	2	5	38	32	9	-	88	89	

Table q.—South Georgia. Catch by months in percentage figures.

Species of whales. Seasons.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	Total.	The Whaling Statistics' total figures.	
<i>Total animals</i>	1938-39	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	1951-52	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	.....	.	.	.	.	.	.	.	.	
	.....	.	.	.	.	.	.	.	.	
	.....	.	.	.	.	.	.	.	.	
<i>Blue-whales</i>	1938-39	-	2.9	28.9	10.5	11.0	9.3	7.9	13.9	13.9
	1951-52	-	0.4	-	-	0.3	0.9	-	0.2	2.9
	1952-53	-	-	0.3	-	-	-	-	0.2	0.2
	1953-54	0.4	0.2	1.0	0.5	-	0.2	4.3	0.4	0.2
	1954-55	0.2	-	1.4	0.5	0.5	0.2	-	0.4	0.4
	1955-56	0.3	-	0.4	-	-	0.2	-	0.1	0.4
	1956-57	0.6	0.2	0.2	0.2	0.2	0.2	-	0.2	0.1
	1957-58	-	0.2	0.2	-	0.3	0.2	-	0.2	0.2
	1958-59	-	-	-	-	0.2	-	-	-	-
1959-60	1.4	0.5	0.4	-	-	0.6	-	0.4	0.4	
<i>Fin-whales</i>	1938-39	100.0	96.7	70.2	88.0	86.7	61.5	36.8	78.0	78.0
	1951-52	98.3	98.5	96.4	89.3	48.2	37.8	14.2	75.2	75.4
	1952-53	97.3	95.7	97.4	71.8	56.1	35.3	35.7	71.1	71.7
	1953-54	99.2	99.4	95.5	76.9	58.1	31.6	5.2	72.9	73.1
	1954-55	98.7	99.0	94.1	91.0	60.2	47.5	-	83.9	84.1
	1955-56	98.6	98.7	98.5	91.8	74.3	75.6	-	87.3	87.5
	1956-57	99.4	95.8	97.0	77.9	53.6	13.4	-	65.6	65.8
	1957-58	86.8	99.6	97.5	89.9	30.1	9.6	-	66.0	66.1
	1958-59	100.0	98.3	87.0	63.7	19.4	6.4	-	51.0	51.1
1959-60	98.0	98.6	96.0	54.3	12.7	2.0	-	49.7	49.7	
<i>Hump-backs</i>	1938-39	-	-	-	-	-	-	-	-	-
	1951-52	-	-	1.6	0.2	-	-	-	0.4	0.4
	1952-53	0.7	0.9	0.3	-	-	0.7	-	0.4	0.4
	1953-54	-	-	0.3	0.7	0.1	0.4	-	0.3	0.3
	1954-55	-	0.3	-	-	-	-	-	0.1	0.1
	1955-56	-	-	-	-	-	-	-	-	-
	1956-57	-	-	-	-	-	-	-	-	-
	1957-58	-	-	-	-	-	-	-	-	-
	1958-59	-	-	-	-	-	-	-	-	-
1959-60	-	-	-	-	-	-	-	-	-	
<i>Sei-whales</i>	1938-39	-	-	-	-	-	3.8	15.8	1.1	1.1
	1951-52	1.7	0.4	-	7.6	47.2	46.4	40.7	18.9	18.7
	1952-53	-	-	-	25.4	42.5	43.5	37.1	21.8	21.4
	1953-54	-	-	0.2	20.1	38.6	47.0	74.8	21.5	21.3
	1954-55	0.1	-	0.2	6.5	38.3	45.5	-	13.1	12.9
	1955-56	-	-	-	4.1	23.1	18.8	-	9.5	9.3
	1956-57	-	-	0.2	18.3	43.2	84.0	-	31.4	31.3
	1957-58	-	-	-	6.5	58.3	77.7	-	27.2	27.1
	1958-59	-	-	-	22.7	65.9	86.8	-	40.4	40.4
1959-60	-	-	1.6	37.8	82.4	94.9	-	46.1	46.1	
<i>Sperm-whales</i>	1938-39	-	0.4	0.9	1.5	2.3	25.4	39.5	7.0	7.0
	1951-52	-	0.7	2.0	2.9	4.3	14.9	45.1	5.3	5.3
	1952-53	2.0	3.4	2.0	2.8	1.4	20.5	22.9	6.5	6.3
	1953-54	0.4	0.4	3.0	1.8	3.2	20.8	20.0	4.9	4.9
	1954-55	1.0	0.7	4.3	2.0	1.0	6.8	-	2.5	2.5
	1955-56	1.1	1.3	1.1	4.1	2.6	5.4	-	3.1	3.1
	1956-57	-	4.0	2.6	3.6	3.0	2.4	-	2.8	2.7
	1957-58	13.2	0.2	2.3	3.6	11.3	12.5	-	6.6	6.6
	1958-59	-	1.7	13.0	13.6	14.5	6.8	-	8.6	8.5
1959-60	0.6	0.9	2.0	7.9	4.9	2.5	-	3.8	3.8	



Table r.—South Georgia. Catch of immature and mature whales 1938/39 and 1951/52—1959/60.

	1938—39.		1951—52.		1952—53.		1953—54.		1954—55.		1955—56.		1956—57.		1957—58.		1958—59.		1959—60.	
	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.	Number of whales.	Per cent.
<b>Blue-whales.</b>																				
Immature																				
males	44	44.9	2	100.0	1	100.0	1	33.3	4	66.7	1	100.0	5	100.0	4	100.0	1	100.0	3	100.0
females	65	48.5	3	75.0	2	66.7	8	80.0	7	100.0	—	—	1	50.0	1	50.0	—	—	4	66.7
animals	109	47.0	5	83.3	3	75.0	9	69.2	11	84.6	1	33.3	6	85.7	5	83.3	1	100.0	7	77.8
Mature																				
males	54	55.1	—	—	—	—	2	66.7	2	33.3	—	—	—	—	—	—	—	—	—	—
females	69	51.5	1	25.0	1	33.3	2	20.0	—	—	2	100.0	1	50.0	1	50.0	—	—	2	33.3
animals	123	53.0	1	16.7	1	25.0	4	30.8	2	15.4	2	66.7	1	14.3	1	16.7	—	—	2	22.2
<b>Fin-whales.</b>																				
Immature																				
males	188	30.7	319	34.6	307	38.9	660	52.5	584	47.6	515	41.9	489	51.7	366	38.4	228	39.9	159	35.7
females	231	33.2	383	36.3	323	39.1	747	54.9	605	42.0	533	41.9	537	50.3	402	31.9	222	31.5	226	32.4
animals	419	32.1	702	35.5	630	39.0	1,407	53.8	1,189	44.5	1,098	41.9	1,026	51.0	768	34.7	450	35.3	385	33.7
Mature																				
males	424	69.3	604	65.4	482	61.1	597	47.5	643	52.4	715	58.1	457	48.3	588	61.6	344	60.1	286	64.3
females	464	66.8	671	63.7	503	60.9	613	45.1	837	58.0	808	58.1	530	49.7	859	68.1	482	68.5	472	67.6
animals	888	67.9	1,275	64.5	985	61.0	1,210	46.2	1,480	55.5	1,523	58.1	987	49.0	1,447	65.3	826	64.7	758	66.3

Table s.—Antarctic whaling results for the various countries 1937/38, 1938/39 and 1947/48—1959/60.

Years.	All countries.		Norway.		United Kingdom.		Union of South Africa.		Japan.		Argentina.	
	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. <sup>1)</sup>		Barrels. <sup>1)</sup>		Barrels. <sup>1)</sup>		Barrels. <sup>1)</sup>		Barrels. <sup>1)</sup>
1937-38.....	46,039	3,340,330	<sup>2)</sup> 14,960	<sup>3)</sup> 1,157,993	13,286	959,692	2,825	193,673	5,582	388,683	1,062	51,766
1938-39.....	38,356	2,820,771	<sup>2)</sup> 11,521	<sup>3)</sup> 842,712	10,022	790,846	1,170	100,945	7,540	483,476	1,024	66,826
1947-48.....	31,318	2,104,051	15,656	1,050,831	8,448	578,757	2,958	181,056	1,324	104,912	814	44,965
1948-49.....	31,435	2,219,621	16,196	1,108,027	7,596	595,803	2,608	160,728	1,643	119,361	919	52,518
1949-50.....	32,396	2,166,489	16,799	1,106,487	7,786	518,417	1,882	145,298	2,114	168,754	946	41,348
1950-51.....	33,997	2,303,690	16,844	1,116,284	6,227	474,330	2,541	161,911	2,741	170,596	796	40,593
1951-52.....	35,237	2,479,180	15,650	1,136,643	6,938	500,254	2,494	185,962	3,831	259,476	798	41,825
1952-53.....	30,653	2,118,097	11,240	813,979	6,964	491,012	2,460	150,455	2,645	207,335	678	32,187
1953-54.....	34,872	2,285,720	14,928	1,027,807	7,620	537,774	2,226	147,271	4,218	252,677	1,083	53,478
1954-55.....	37,654	2,242,555	14,491	869,241	7,912	471,315	1,696	99,809	5,958	366,915	947	50,568
1955-56.....	38,580	2,307,171	14,510	852,482	7,444	474,760	2,184	109,539	6,462	408,853	812	43,376
1956-57.....	36,115	2,246,922	15,043	1,004,373	6,266	381,931	1,596	86,586	8,093	492,507	1,108	51,330
1957-58.....	39,896	2,317,638	13,289	853,810	7,080	400,705	—	—	11,763	627,849	1,860	94,199
1958-59.....	38,890	2,152,659	14,071	826,037	5,425	293,660	—	—	12,558	646,130	923	39,430
1959-60.....	38,892	2,148,438	11,324	681,330	5,165	288,117	—	—	12,359	617,141	932	40,500
<i>In per cent</i>	%	%	%	%	%	%	%	%	%	%	%	%
1937-38.....	100.0	100.0	32.5	34.7	28.9	28.7	6.1	5.8	12.1	11.6	2.3	1.6
1938-39.....	100.0	100.0	30.0	29.9	26.1	28.0	3.1	3.6	19.6	17.1	2.7	2.4
1947-48.....	100.0	100.0	50.0	49.9	27.0	27.5	9.4	8.6	4.2	5.0	2.6	2.1
1948-49.....	100.0	100.0	51.5	49.9	24.2	26.9	8.3	7.2	5.2	5.4	2.9	2.4
1949-50.....	100.0	100.0	51.9	51.1	24.0	23.9	5.8	6.7	6.5	7.8	2.9	1.9
1950-51.....	100.0	100.0	49.5	48.5	18.3	20.6	7.5	7.0	8.1	7.4	2.3	1.7
1951-52.....	100.0	100.0	44.4	45.8	19.7	20.2	7.1	7.5	10.9	10.5	2.2	1.7
1952-53.....	100.0	100.0	36.7	38.4	22.8	23.2	8.0	7.1	8.6	9.8	2.2	1.5
1953-54.....	100.0	100.0	42.8	45.0	21.8	23.5	6.4	6.5	12.1	11.0	3.1	2.3
1954-55.....	100.0	100.0	38.5	38.8	21.0	21.0	4.5	4.5	15.8	16.3	2.5	2.2
1955-56.....	100.0	100.0	37.6	36.9	19.3	20.6	5.7	4.7	16.7	17.7	2.1	1.9
1956-57.....	100.0	100.0	41.6	44.7	17.4	17.0	4.4	3.9	22.4	21.9	3.1	2.3
1957-58.....	100.0	100.0	33.3	36.8	17.7	17.3	—	—	29.5	27.1	4.7	4.1
1958-59.....	100.0	100.0	36.2	38.4	13.9	13.6	—	—	32.3	30.0	2.4	1.8
1959-60.....	100.0	100.0	29.1	31.7	13.3	13.4	—	—	31.8	28.7	2.4	1.9

<sup>1)</sup>, <sup>2)</sup>, <sup>3)</sup> See notes on next page.

Table 5 (continued).

Years.	Germany.		Panama.		United States of America.		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.
		Barrels. <sup>1)</sup>		Barrels. <sup>1)</sup>		Barrels. <sup>1)</sup>		Barrels. <sup>1)</sup>		Barrels. <sup>1)</sup>
1937-38....	5,237	356,858	1,527	117,650	1,560	114,015	-	-	-	-
1938-39....	5,066	374,149	907	68,853	1,106	92,964	-	-	-	-
1947-48....	-	-	-	-	-	-	1,294	85,130	824	58,400
1948-49....	-	-	-	-	-	-	1,366	109,849	1,107	73,335
1949-50....	-	-	-	-	-	-	1,295	82,792	1,574	103,393
1950-51....	-	-	1,497	126,522	-	-	1,660	103,560	1,691	109,894
1951-52....	-	-	1,408	97,073	-	-	1,650	110,300	2,468	147,647
1952-53....	-	-	2,365	164,150	-	-	1,575	103,710	2,726	155,269
1953-54....	-	-	-	-	-	-	1,711	97,596	3,086	169,117
1954-55....	-	-	2,512	147,880	-	-	848	64,739	3,290	172,088
1955-56....	-	-	2,730	160,960	-	-	1,665	103,465	2,773	153,736
1956-57....	-	-	-	-	-	-	1,409	92,489	2,600	137,706
1957-58....	-	-	-	-	-	-	1,867	116,497	4,037	224,578
1958-59....	-	-	-	-	-	-	2,226	126,488	3,687	220,914
1959-60....	-	-	-	-	-	-	2,081	143,050	7,031	378,300
<i>In per cent</i>	%	%	%	%	%	%	%	%	%	%
1937-38....	11.4	10.7	3.3	3.5	3.4	3.4	-	-	-	-
1938-39....	13.2	13.3	2.4	2.4	2.9	3.3	-	-	-	-
1947-48....	-	-	-	-	-	-	4.2	4.1	2.6	2.8
1948-49....	-	-	-	-	-	-	4.4	4.9	3.5	3.3
1949-50....	-	-	-	-	-	-	4.0	3.8	4.9	4.8
1950-51....	-	-	4.4	-	-	-	4.9	4.5	5.0	4.8
1951-52....	-	-	4.0	5.5	-	-	4.7	4.4	7.0	6.0
1952-53....	-	-	7.7	3.9	-	-	5.1	4.9	8.9	7.3
1953-54....	-	-	-	7.8	-	-	4.9	4.3	8.9	7.4
1954-55....	-	-	6.7	-	-	-	2.3	2.9	8.7	7.7
1955-56....	-	-	7.1	6.6	-	-	4.3	4.5	7.2	6.7
1956-57....	-	-	-	7.0	-	-	3.9	4.1	7.2	6.1
1957-58....	-	-	-	-	-	-	4.7	5.0	10.1	9.7
1958-59....	-	-	-	-	-	-	5.7	5.9	9.5	10.3
1959-60....	-	-	-	-	-	-	5.3	6.7	18.1	17.6

<sup>1)</sup> Barrel = 170 kg. (Barrel = abt.  $\frac{1}{3}$  long ton. 1 long ton = 1,016 kg.) <sup>2)</sup> Including the catch of two Norwegian expeditions hired by Germany—in 1937-38 2,158 whales and in 1938-39 1,658 whales. <sup>3)</sup> Including the production of two Norwegian expeditions hired by Germany—in 1937-38 180,750 barrels and in 1938-39 118,380 barrels.

Table t.—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
1925-26.....	84.0	84.8	1942-43.....	95.2	—
1926-27.....	96.4	91.1	1943-44.....	120.2	142.9
1927-28.....	106.4	92.8	1944-45.....	111.5	118.0
1928-29.....	108.2	98.3	1945-46.....	83.1	98.6
1929-30.....	110.7	109.6	1946-47.....	112.5	113.1
1930-31.....	100.1	105.6	1947-48.....	128.3	111.2
1931-32.....	92.9	102.6	1948-49.....	126.5	115.9
1932-33.....	86.5	114.6	1949-50.....	115.0	118.6
1933-34.....	91.8	111.9	1950-51.....	121.5	117.3
1934-35.....	105.1	102.2	1951-52.....	127.6	129.4
1935-36.....	95.5	101.6	1952-53.....	126.3	128.0
1936-37.....	104.5	111.7	1953-54.....	121.1	128.6
1937-38.....	95.7	111.1	1954-55.....	124.6	117.3
1938-39.....	117.6	107.1	1955-56.....	123.6	121.6
1939-40.....	106.1	117.2	1956-57.....	122.9	128.7
1940-41.....	109.1	105.8	1957-58.....	126.9	124.9
1941-42.....	110.1	—	1958-59.....	114.0	118.2
			1959-60.....	120.5	123.0

<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. ¼ long ton. 1 long ton = 1,016 kg.)

*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 II	between	60° west	and	0°
" III	"	0°	"	70° east
" IV	"	70° east	"	120° "
" V	"	130° "	"	170° west
" VI	"	170° west	"	120° "
" I	"	120° "	"	60° "

A survey of the number and average size of blue-whales, fin-whales and humpbacks killed in the individual areas from and including the season 1931-32 is given in table *l*, page 24.

From the survey below will be seen the whaling results in the individual areas during the two latest seasons.

	Catch in blue-whale units 1958-59			Catch in blue-whale units 1959-60		
	Number of blue-whale units	Per cent	Per catcher's day's work	Number of blue-whale units	Per cent	Per catcher's day's work
Total .....	15,235	100.0	0.94	15,421	100.0	0.73
Of which in:						
Area II ...	2,215	14.5	0.79	2,585	16.8	0.55
" III ...	5,117	33.6	0.94	4,983	32.3	0.68
" IV ...	4,739	31.1	1.03	3,765	24.4	0.91
" V ...	1,776	11.7	0.93	3,401	22.0	0.87
" VI ...	1,388	9.1	0.93	365	2.4	0.57
" I ...	—	—	—	322	2.1	0.62

In 1959-60 the most favourable results were obtained in area III, where the whaling operations resulted in 4,983 blue-whale units or 32.3 per cent of the total catch. During the two preceding seasons 1958-59 and 1957-58 the corresponding percentage figures for this area were 33.6 and 35.7, respectively. In area IV the catch in 1959-60 was also favourable, with 3,765 blue-whale units or 24.4 per cent of the total catch. In the same area the catch represented 31.1 per cent in 1958-59, but only 13.7 per cent in 1957-58 and 1.5 per cent in 1956-57. In area V the catch increased to 3,401 blue-whale units or 22.0 per cent in 1959-60, from 1,776 blue-whale units or 11.7 per cent in 1958-59 and from 716 blue-whale units or 4.8 per cent in 1957-58.

On the other hand the whaling operations in the Pacific sector (between 70° west and 160° west) resulted during the season 1959-60 in 401,8 blue-whale units only. This sector, which was previously closed, has been open for pelagic catch during the last 5 seasons. The results obtained were as follows:

Season	Catch in blue-whale units	Per cent of total catch
1955-56 .....	3,681.2	24.9
1956-57 .....	5,804.2	39.7
1957-58 .....	3,687.2	25.0
1958-59 .....	1,188.0	7.8
1959-60 .....	401.8	2.6
<hr/> Total.....	14,762.4	19.7

This aggregate represents 19.7 per cent of the total catch during these five seasons.

Table *m*, page 27, contains a summary of the aggregate catch of blue-whales, fin-whales, humpbacks and sperm-whales in the individual areas throughout the entire period 1931/32-1959/60. During this period a total number of 692,002 baleen whales (excluding sei-whales) have been killed. In the survey below the percentage proportion of the catch specified for each area in the entire period is compared with the corresponding figures for the last two seasons:—

Area		Blue-, fin- and humpback-whales killed		
		Seasons 1931/32-1959/60	Season 1958/59	Season 1959/60
II	....	27.0 per cent	14.9 per cent	17.3 per cent
III	....	37.2 " "	33.7 " "	33.6 " "
IV	....	21.8 " "	32.1 " "	24.2 " "
V	....	7.0 " "	11.3 " "	21.0 " "
VI	....	4.7 " "	8.0 " "	1.8 " "
I	....	2.3 " "	— " "	2.1 " "
Total	.....	100.0 per cent	100.0 per cent	100.0 per cent

**Table u.—Average weekly production of whale-oil per blue-whale unit in the pelagic whaling 1958-59 and 1959-60.**

Season 1958-59.				Season 1959-60.			
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.
10/1 1959	89,495	1,029.7	86.9	2/1 1960 <sup>1)</sup>	139,024	1,399.7	99.3
17/1 "	172,196	1,617.9	106.4	9/1 "	153,047	1,393.5	109.8
24/1 "	199,501	1,755.8	113.6	16/1 "	145,127	1,329.7	109.1
31/1 "	176,274	1,544.9	114.1	23/1 "	169,285	1,485.5	114.0
7/2 "	238,084	2,240.5	106.3	30/1 "	130,717	1,140.1	114.7
14/2 "	166,759	1,302.6	128.0	6/2 "	156,530	1,455.8	107.5
21/2 "	131,748	1,037.7	127.0	13/2 "	130,135	992.7	131.1
28/2 "	185,929	1,571.8	118.3	20/2 "	143,014	1,173.7	121.8
7/3 "	189,648	1,439.8	131.7	27/2 "	142,664	1,090.7	130.8
16/3 "	242,952	1,693.6	143.5	5/3 "	127,793	935.0	136.7
				12/3 "	89,266	625.8	142.6
				19/3 "	118,329	898.9	131.6
				26/3 "	98,107	777.7	126.2
				2/4 "	37,076	267.5	138.6
				7/4 "	75,954	454.7	167.0
<b>Total</b>	<b>1,792,586</b>	<b>15,234.3</b>	<b>117.7</b>	<b>Total</b>	<b>1,856,068</b>	<b>15,421.0</b>	<b>120.4</b>

<sup>1)</sup> Include the catch and production of one expedition from and incl. December 16th 1959.

<sup>2)</sup> Include the catch and production of one expedition up to and incl. April 15th 1960.

*Pelagic whaling results relatively to the whaling matériel and the whaling period.*

During the last season the average result per catcher's day's work was 0.73 blue-whale units, as compared with 0.94 in the season 1958-59. In all the previous post-war seasons the lowest average output has been 0.84 (1948-49). If we consider the catch per catcher's day's work, there was a decline of 22.3 per cent from the season 1958-59 to 1959-60. As will appear from the survey below the largest decrease in the catch occurred in Areas II, III and VI, but the decline was also considerable in Areas IV and V.

Season	Average result of blue-whale units per catcher's day's work.						
	Area II	Area III	Area IV	Area V	Area VI	Area I	All areas
1950-51	0.77	0.88	0.97	0.81	0.93	1.18	0.86
1951-52	0.89	1.06	0.94	0.82	0.94	—	0.94
1952-53	0.74	0.98	0.90	0.79	0.68	—	0.86
1953-54	0.86	1.04	1.10	0.82	1.01	1.26	0.98
1954-55	0.77	0.87	1.13	1.16	1.05	—	0.91
1955-56	0.98	0.89	0.96	1.14	0.90	1.35	0.99
1956-57	0.93	0.92	1.04	0.43	1.01	0.95	0.95
1957-58	0.73	0.95	1.10	0.92	0.99	0.72	0.90
1958-59	0.79	0.94	1.03	0.93	0.93	—	0.94
1959-60	0.55	0.68	0.91	0.87	0.57	0.62	0.73

Table n, page 28, gives a survey of the pelagic whaling results of the individual participating countries as from 1937-38 (excl. the war seasons)

regarding the number of whales killed, oil production and number of catchers employed in each season.

### South Georgia.

The whaling results from South Georgia for each season since 1919–20 are given in table *o*, page 29. During all the post-war seasons, except the season 1957–58 when only 2 shore stations were operating, 3 shore stations have carried on whaling from South Georgia. In 1959–60 2,333 whales were killed, against 2,526 in the preceding season. During the 14 post-war seasons 1946/47–1959/60 the annual average number of whales killed has been about 2,900. During the earlier of these post-war seasons quite a considerable number of blue-whales was killed off South Georgia, viz. 327 in 1946–47, 226 in 1948–49 and 82 in 1950–51. During later seasons the blue-whale catch has been insignificant. In 1959–60 only 9 blue-whales were killed. The fin-whale is the prevailing species killed in the pelagic operations as well as off South Georgia, but on this ground the catch of sei-whales is also important. During all the post-war seasons a greater number of sei-whales has been killed here than in pelagic whaling.

The oil production amounted to 93,147 barrels of whale-oil and 4,399 barrels of sperm-oil, or a total of 97,546 barrels. During the previous season the output was 92,113 barrels of whale-oil and 10,305 barrels of sperm-oil, or a total of 102,418 barrels.

Tables *p* and *q*, pages 30 and 31, give the catch off South Georgia by months in absolute and percentage figures for 1938–39 and for the post-war seasons from and including 1950–51. Table *r*, page 32 shows the proportion of mature and immature animals killed.

### *Oil production by participating country.*

In table *s*, pages 33 and 34, the total whaling results in the Antarctic from 1937–38 up to and including 1959–60, with exception of the war years, 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:—

	Oil production during the last 5 seasons				
	1955/56 Per cent	1956/57 Per cent	1957/58 Per cent	1958/59 Per cent	1959/60 Per cent
Norway .....	36.9	44.7	26.8	38.4	31.7
United Kingdom .....	20.6	17.0	17.3	13.6	13.4
Union of South Africa .....	4.7	3.9	—	—	—
Japan .....	17.7	21.9	27.1	50.0	28.7
Panama .....	7.0	—	—	—	—
U.S.S.R. ....	6.7	6.1	9.7	10.3	17.6
Netherlands .....	4.5	4.1	5.0	5.9	6.7
Argentina .....	1.9	2.3	4.1	1.8	1.9
Total .....	100.0	100.0	100.0	100.0	100.0

*Oil production per blue-whale unit.*

The average output of whale-oil per blue-whale unit for South Georgia and for the pelagic expeditions from and including the season 1925–26 has been recorded in table *t*, page 35. For pelagic whaling the average output was 120.5 barrels during the season 1959–60 against 118.2 barrels during the preceding season. In the survey below is given the average output of oil per blue-whale unit in the individual areas from and including 1951–52.

Season	Average oil output per blue-whale unit during the last 9 seasons						Total Barrels
	Area II Barrels	Area III Barrels	Area IV Barrels	Area V Barrels	Area VI Barrels	Area I Barrels	
1951–52 ..	141.5	129.9	115.2	122.3	136.2	—	129.4
1952–53 ..	149.9	120.2	117.4	126.2	134.3	—	128.0
1953–54 ..	137.3	129.0	114.1	105.1	119.7	148.2	128.6
1954–55 ..	133.4	112.2	115.3	112.0	118.2	—	117.3
1955–56 ..	127.5	113.7	105.6	114.2	118.3	144.3	121.6
1956–57 ..	133.0	139.3	146.5	88.2	118.3	122.9	128.7
1957–58 ..	133.6	125.6	126.5	99.7	116.7	126.9	124.9
1958–59 ..	131.0	123.6	107.0	112.3	117.7	—	118.2
1959–60 ..	132.3	128.8	101.3	120.2	121.1	117.7	123.0

The lowest oil output per blue-whale unit during the last season was in area IV, viz. 101.3 barrels, as compared with 132.3 and 128.8 barrels in area II and III, respectively. In the other areas the output varied between 117.7 and 121.1 barrels.

The production of whale-oil per catcher's day's work last season was as follows:

Season	Area II Barrels	Area III Barrels	Area IV Barrels	Area V Barrels	Area VI Barrels	Area I Barrels	Total Barrels
1959–60 ..	72.75	87.40	91.67	104.71	68.92	73.11	87.27

While the catch in blue-whale units per catcher's day's work was highest in area IV (see page 35), the production of whale-oil per catcher's day's work was highest in area V.

Table *u*, page 37, shows the average weekly production of whale oil per blue-whale unit for the pelagic expeditions during the seasons 1958–59 and 1959–60. It will appear from this table that the average weekly yield per blue-whale unit during the season 1958–59 increased from 106.4 barrels during the week 11/1–17/1 to 143.5 barrels during the last week 8/3–16/3. In the season 1959–60 the output increased from 99.3 barrels during the week 28/12–2/1 to 142.6 during the week 6/3–12/3. The output during the last 5 days of operation was stated to be 167.0 barrels. In this production, however, must be taken into account the «surplus» after the sounding of the tanks, which is usually included in the last weekly reports.



Table v.—Production of by-products in the Antarctic whaling in the seasons 1946/47—1959/60.

Seasons Countries	By-products	Whale	Whale liver	Liver-	Liver	Meat	Whale meat,	Whale	Other
		meat-meal, bone-meal, grax meal, guano	or liver flakes	oil	meat	extract, liver extract	blubber, ventral grooves	solubles	by- products <sup>1)</sup>
		Long tons	L. tons	L. tons	L. tons	L. tons	L. tons	L. tons	L. tons
1946-47	Total	19,302	671	79	380	104	21,914	-	33
1947-48	Total	24,460	918	112	495	138	30,062	-	1,231
1948-49	Total	26,792	1,173	166	596	88	39,635	-	2,127
1949-50	Total	25,852	817	250	573	97	46,824	779	1,532
1950-51	Total	25,821	841	264	622	44	28,389	2,444	946
1951-52	Total	24,116	823	195	435	53	28,299	5,760	821
1952-53	Total	25,584	601	155	456	134	28,581	5,390	57
1953-54	Total	35,660	185	199	385	286	34,792	9,885	1,786
1954-55	Total	35,519	669	218	115	459	42,681	8,508	3,497
<i>1955-56.</i>									
Norway		10,249	134	63	-	82	104	1,101	30
United Kingdom		21,455	-	37	162	183	2,932	6,445	6
Union of S. Africa		3,404	-	29	-	-	-	-	-
Netherlands		1,936	-	14	-	-	-	-	-
U.S.S.R.		2,021	621	-	-	-	497	-	-
Panama		-	-	15	-	-	-	-	70
Japan		-	-	94	-	-	42,302	-	2,437
Argentina		4,124	-	-	-	-	-	-	7
Total		43,189	755	252	162	265	45,835	7,546	2,550
<i>1956-57.</i>									
Norway		9,859	104	49	-	136	365	1,520	18
United Kingdom		18,156	56	39	156	225	5,060	5,006	14
Union of S. Africa		3,557	-	18	-	-	-	-	-
Netherlands		2,380	-	13	-	-	-	-	54
U.S.S.R.		2,471	532	-	-	-	-	-	-
Japan		-	-	136	-	-	65,295	-	4,420
Argentina		6,312	-	-	-	-	-	-	4
Total		42,735	692	255	156	361	70,720	6,526	4,510
<i>1957-58.</i>									
Norway		5,099	57	47	-	178	401	1,486	4
United Kingdom		21,611	1	39	113	411	4,822	8,147	17
Netherlands		2,242	-	15	-	-	-	-	43
U.S.S.R.		3,942	537	-	-	-	-	-	-
Japan		881	-	137	-	-	80,372	-	11,447
Argentina		11,139	-	-	-	-	-	-	-
Total		44,914	595	238	113	589	85,595	9,633	11,511
<i>1958-59.</i>									
Norway		9,609	25	40	-	399	1,375	-	3
United Kingdom		16,656	-	23	138	702	3,887	2,153	15
Netherlands		3,507	-	12	-	-	-	-	41
U.S.S.R.		4,528	620	-	-	-	-	-	-
Japan		1,199	-	112	-	-	73,396	-	20,120
Argentina		5,785	-	-	-	-	-	-	-
Total		41,284	645	187	138	1,101	78,658	2,153	20,179
<i>1959-60.</i>									
Norway		9,142	10	26	-	965	2,159	-	30
United Kingdom		18,129	-	4	-	1,182	6,080	1,038	15
Netherlands		4,635	-	11	-	-	1,699	-	55
U.S.S.R.		12,150	1,306	-	-	-	2,106	-	-
Japan		2,810	-	90	-	-	83,953	-	20,401
Argentina		6,158	-	-	-	-	-	-	3
Total		53,024	1,316	131	-	2,147	95,997	1,038	20,504

<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, etc.

*By-products.*

In table *v*, page 40, detailed information is given on the production of by-products in the Antarctic during the post-war seasons. From and including the season 1955–56 the figures are distributed in respect to the individual countries.

As it will appear from the table, the production of by-products reached a maximum during the last season. The production of frozen and salted whale meat amounted to 95,997 tons, which is about 17,300 tons more than produced during the 1958–59 season. The production of whale meal was 53,024 tons against 41,284 tons during the preceding season. The production of whale meat extract was nearly doubled – amounting to 2,147 tons or 1,046 tons more than in 1958–59.

*Whaling fleet crews.*

From the survey below will be seen the number of men of different nationalities employed in the Antarctic whaling industry during the 3 latest seasons. The figures include the crews employed on the freezing- and refrigeratorships operating in the Antarctic.

Nationalities	Number of men employed in the Antarctic whaling industry					
	Season 1957/58		Season 1958/59		Season 1959/60	
	Number	Per cent	Number	Per cent	Number	Per cent
Norwegian . . . . .	6,693	37.6	6,817	38.9	6,152	34.5
Japanese . . . . .	8,402	47.2	7,974	45.4	8,100	45.4
British . . . . .	911	5.1	944	5.4	890	5.0
Russian <sup>1)</sup> . . . . .	1,020	5.8	1,020	5.8	1,900	10.7
Others <sup>2)</sup> . . . . .	765	4.3	792	4.5	787	4.4
Total . . . . .	17,791	100.0	17,547	100.0	17,829	100.0

<sup>1)</sup> Estimated. <sup>2)</sup> Incl. also men whose nationality is unknown.



**Table No. 1.—Whaling in the Antarctic in the season 1959/60.**

Geographical areas.	Species of whales caught.						Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Total of whales.		Shore stations.	Floating factories.	Catchers.
South Georgia . . . .	9	1,160	—	1,075	89	2,333	Barrels <sup>1)</sup> 97,546	3	—	21
Antarctic, pelagic whaling . . . . .	1,230	26,415	1,338	3,234	4,138 <sup>2)</sup>	36,355	2,050,892	—	20	220
Total	1,239	27,575	1,338	4,309	4,227	38,688	2,148,438	3	20	241

<sup>1)</sup> Barrel = 170 kg. (Barrel = abt.  $\frac{1}{6}$  long ton, 1 long ton = 1,016 kg.) <sup>2)</sup> In addition 204 Minke-whales and 55 killer-whales.

**Table No. 2.—Whaling results for the various countries in the Antarctic in the season 1959/60.**

Countries. Geographical areas.	Species of whales caught.						Oil production.	Expeditions.		
	Blue.	Fin.	Hump-back.	Sei.	Sperm.	Total of whales.		Shore stations.	Floating factories.	Catchers.
Norway:—							Barrels <sup>1)</sup>			
Antarctic, pelagic	115	8,696	137	301	1,407	10,656	655,033	—	8	70
South Georgia . . .	—	318	—	333	17	668	26,297	1	—	7
Japan:—										
Antarctic, pelagic	431	8,897	280	1,351	1,400	12,359	617,141	—	6	69
United Kingdom:—										
Antarctic, pelagic	104	3,364	123	392	448 <sup>2)</sup>	4,431	257,368	—	3	31
South Georgia . . .	3	375	—	316	39	733	30,749	1	—	7
U.S.S.R.:—										
Antarctic, pelagic	526	3,554	720	1,188	840	6,828	378,300	—	2	37
Netherlands:—										
Antarctic, pelagic	54	1,904	78	2	43	2,081	143,050	—	1	13
Argentina:—										
South Georgia . . .	6	467	—	426	33	932	40,500	1	—	7
Total	1,239	27,575	1,338	4,309	4,227	38,688	2,148,438	3	20	241

<sup>1)</sup> Barrel = 170 kg. (Barrel = abt.  $\frac{1}{6}$  long ton, 1 long ton = 1,016 kg.) <sup>2)</sup> In addition 1 Minke-whale. <sup>3)</sup> In addition 204 Minke-whales and 55 killer-whales.

**Table No. 3.—Average size of whales caught in the Antarctic  
in the season 1959/60.**

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
<b>Blue-whales.</b>				
<i>South Georgia</i> .....	No. 1	—	74.00	74.00
Males 3} Total 9.	" 2	70.67	74.33	72.50
Females 6}				
Average		70.67	74.17	73.00
<i>Antarctic, pelagic whaling</i> .....	No. 1	—	85.00	85.00
Males 574} Total 1,228.	" 2	78.42	83.06	81.14
Females 654}	" 3	74.46	82.50	79.33
	" 4	74.85	81.79	79.22
	" 5	77.04	80.61	79.05
	" 6	74.86	80.31	78.40
	" 7	76.18	79.78	78.31
	" 8	80.00	77.75	78.20
	" 9	—	78.00	78.00
	" 10	74.70	77.47	76.44
	" 11	75.27	77.87	76.37
	" 12	75.38	76.33	75.79
	" 13	74.50	76.50	75.50
	" 14	73.00	76.28	75.00
	" 15	74.14	75.85	74.96
	" 16	—	73.50	73.50
	" 17	71.75	73.70	72.90
	" 18	72.02	73.44	72.86
	" 19	74.80	70.71	72.22
	" 20	69.50	74.00	71.00
Average		74.52	77.04	75.86
<b>Fin-whales.</b>				
<i>South Georgia</i> .....	No. 1	63.70	68.24	66.47
Males 445} Total 1,143.	" 2	63.90	67.96	66.27
Females 698}	" 3	64.03	67.55	66.27
Average		63.86	67.94	66.35
<i>Antarctic, pelagic whaling</i> .....	No. 1	67.07	70.94	68.90
Males 12,735} Total 26,271.	" 2	66.58	68.59	67.54
Females 13,536}	" 3	65.50	68.87	67.30
	" 4	65.39	69.02	67.24
	" 5	65.08	69.10	67.15
	" 6	65.60	68.28	67.00
	" 7	65.21	68.18	66.81
	" 8	65.12	68.19	66.81
	" 9	64.87	68.62	66.78
	" 10	65.30	68.25	66.75
	" 11	65.35	68.25	66.72
	" 12	64.81	68.28	66.56
	" 13	65.09	68.13	66.50
	" 14	64.24	67.96	66.26
	" 15	64.08	67.84	66.25
	" 16	64.26	67.81	66.09
	" 17	64.26	67.18	65.79
	" 18	63.77	67.09	65.51
	" 19	63.96	65.92	64.93
	" 20	63.36	66.09	64.83
Average		64.99	68.13	66.61

Table No. 3 (continued).

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
		Engl. feet.	Engl. feet.	Engl. feet.
<b><u>Humpbacks.</u></b>				
<i>Antarctic, pelagic whaling</i> . . . . .	No. 1	43.00	47.50	46.00
Males 568 } Total 1,332.	" 2	41.50	45.50	43.50
Females 764 }	" 3	41.19	42.48	41.93
	" 4	39.00	42.67	41.75
	" 5	40.38	42.38	41.65
	" 6	40.41	42.38	41.60
	" 7	39.38	42.78	41.51
	" 8	40.70	42.05	41.48
	" 9	39.80	42.62	41.39
	" 10	39.52	41.84	41.04
	" 11	40.00	41.40	40.88
	" 12	39.59	41.29	40.48
	" 13	39.03	39.90	39.35
	" 14	37.62	40.33	39.14
Average		39.78	41.79	40.93
<b><u>Sei-whales.</u></b>				
<i>South Georgia</i> . . . . .	No. 1	48.51	51.56	50.11
Males 505 } Total 1,060.	" 2	48.29	50.99	49.69
Females 555 }	" 3	47.58	50.21	48.97
Average		48.08	50.84	49.53
<i>Antarctic, pelagic whaling</i> . . . . .	No. 1	—	53.00	53.00
Males 1,038 } Total 3,219.	" 2	—	52.40	52.40
Females 2,181 }	" 3	48.00	51.85	51.74
	" 4	49.84	52.80	51.71
	" 5	49.00	52.17	51.70
	" 6	46.50	51.77	51.17
	" 7	50.40	51.99	51.13
	" 8	—	51.00	51.00
	" 9	48.76	51.44	50.96
	" 10	49.16	51.92	50.92
	" 11	50.24	51.05	50.71
	" 12	48.32	51.89	50.62
	" 13	47.26	51.13	50.58
	" 14	49.67	51.00	50.38
	" 15	47.87	50.46	49.88
	" 16	48.00	49.67	49.50
	" 17	47.40	49.61	49.35
	" 18	47.56	50.61	49.32
	" 19	47.28	49.82	48.85
Average		48.73	51.27	50.45
<b><u>Sperm-whales.</u></b>				
<i>South Georgia</i> . . . . .	No. 1	49.59	—	49.59
Males 88.	" 2	47.42	—	47.42
	" 3	46.73	—	46.73
Average		47.58	—	47.58

Table No. 3 (continued).

Geographical areas. Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total animals.
<i>Antarctic, pelagic whaling</i> . . . . . Males 4,128.	No. 1	Engl. feet. 50.14	Engl. feet. —	Engl. feet. 50.14
	„ 2	48.64	—	48.64
	„ 3	48.55	—	48.55
	„ 4	48.32	—	48.32
	„ 5	47.93	—	47.93
	„ 6	47.83	—	47.83
	„ 7	47.78	—	47.78
	„ 8	47.71	—	47.71
	„ 9	47.26	—	47.26
	„ 10	47.10	—	47.10
	„ 11	47.04	—	47.04
	„ 12	47.02	—	47.02
	„ 13	46.89	—	46.89
	„ 14	46.61	—	46.61
	„ 15	46.21	39.00	46.50
	„ 16	46.33	—	46.33
	„ 17	46.15	—	46.15
	„ 18	46.15	—	46.15
	„ 19	45.92	—	45.92
	„ 20	45.01	—	45.01
Average		47.29	39.00	47.26

Table No. 4.—Whales caught in the Antarctic in the season 1959/60, by species, sex and size.

## Total Antarctic.

## Blue-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
61	—	1	1	83	15	22	37
62	1	—	1	84	7	27	34
63	—	1	1	85	6	18	24
64	1	2	3	86	2	22	24
65	2	3	5	87	2	17	19
66	1	5	6	88	—	14	14
67	7	5	12	89	—	8	8
68	8	6	14	90	—	9	9
69	11	4	15	91	—	5	5
70	69	57	126	92	—	1	1
71	55	43	98	93	—	1	1
72	50	64	114	94	—	3	3
73	65	50	115	95	—	1	1
74	55	34	89	Sum	577	660	1,237
75	45	36	81	Average size {			Males: 74,50 feet
76	38	44	82	Females: 77,01 „			
77	39	38	77	Total animals: 75,84 „			
78	29	35	64	Per cent {			Males: 46,65
79	26	24	50	Females: 53,35			
80	22	25	47				
81	12	19	31				
82	9	16	25				

Table No. 4 (continued).

## Fin-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
45	—	1	1	71	485	1,074	1,559
46	—	1	1	72	220	1,062	1,282
49	—	3	3	73	100	1,070	1,170
50	2	5	7	74	57	871	928
51	6	4	10	75	26	755	781
52	10	8	18	76	4	484	488
53	18	24	42	77	3	303	306
54	42	27	69	78	2	153	155
55	59	45	104	79	3	70	73
56	28	24	52	80	—	42	42
57	520	435	955	81	—	8	8
58	557	465	1,022	82	—	7	7
59	499	417	916	83	—	1	1
60	596	547	1,143	85	—	1	1
61	598	456	1,054	86	1	—	1
62	669	491	1,160	Sum	13,180	14,234	27,414
63	820	529	1,349	Average size {			Males: 64.95 feet
64	958	560	1,518	{			Females: 68.12 "
65	1,187	575	1,762	{			Total animals: 66.60 "
66	1,242	566	1,808	Per cent {			Males: 48.08 "
67	1,339	660	1,999	{			Females: 51.92 "
68	1,311	694	2,005				
69	1,000	773	1,773				
70	818	1,023	1,841				

## Humpbacks.

30	1	—	1	46	4	54	58
31	—	1	1	47	5	29	34
32	—	2	2	48	—	20	20
33	6	3	9	49	1	12	13
34	4	5	9	50	1	5	6
35	33	19	52	51	—	5	5
36	40	34	74	53	1	1	2
37	47	39	86	Sum	568	764	1,332
38	64	44	108	Average size {			Males: 39.78 feet
39	76	67	143	{			Females: 41.79 "
40	65	73	138	{			Total animals: 40.93 "
41	70	72	142	Per cent {			Males: 42.64 "
42	56	71	127	{			Females: 57.36 "
43	46	71	117				
44	29	82	111				
45	19	55	74				

## Sei-whales.

40	4	3	7	55	10	154	164
41	12	2	14	56	3	77	80
42	7	7	14	57	2	22	24
43	15	7	22	58	—	7	7
44	32	16	48	59	—	1	1
45	65	32	97	61	—	1	1
46	129	70	199	66	—	1	1
47	231	98	329	Sum	1,543	2,736	4,279
48	257	176	433	Average size {			Males: 48.51 feet
49	263	250	513	{			Females: 51.18 "
50	260	358	618	{			Total animals: 50.22 "
51	131	430	561	Per cent {			Males: 36.06 "
52	75	420	495	{			Females: 63.94 "
53	32	351	383				
54	15	253	268				



Table No. 4 (continued).

## Sperm-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
38	7	3	10	52	182	—	182
39	28	—	28	53	111	—	111
40	50	3	53	54	63	—	63
41	97	—	97	55	35	—	35
42	151	—	151	56	9	—	9
43	206	—	206	57	3	—	3
44	290	—	290	Sum	4,209	6	<sup>1</sup> )4,216
45	434	—	434	Average size	{	Males:	47.29 feet
46	442	—	442			Females:	39.00 "
47	448	—	448			Total animals:	47.26 "
48	521	—	521			Per cent	{
49	453	—	453			Females:	0.14 "
50	409	—	<sup>1</sup> )410				
51	270	—	270				

<sup>1</sup>) Incl. one hermaphrodite sperm-whale of 50 feet.

## a. South Georgia.

## Blue-whales.

64	—	1	1	Average size	{	Males:	70.67 feet
70	1	1	2			Females:	74.17 "
71	2	1	3			Total animals:	73.00 "
72	—	1	1	Per cent	{	Males:	33.33 "
80	—	1	1			Females:	66.67 "
88	—	1	1				
Sum	3	6	9				

## Fin-whales.

45	—	1	1	69	25	33	58
46	—	1	1	70	17	57	74
49	—	1	1	71	5	55	60
51	1	—	1	72	5	45	50
52	1	2	3	73	2	51	53
53	1	1	2	74	—	53	53
54	1	1	2	75	1	40	41
55	1	—	1	76	—	27	27
56	1	—	1	77	—	17	17
57	31	31	62	78	—	7	7
58	35	26	61	79	—	2	2
59	20	21	41	80	—	1	1
60	21	26	47	Sum	445	698	1,143
61	21	26	47	Average size	{	Males:	63.86 feet
62	25	35	60			Females:	67.94 "
63	27	24	51			Total animals:	66.35 "
64	32	30	62			Per cent	{
65	43	12	55			Females:	61.07 "
66	46	25	71				
67	47	21	68				
68	36	26	62				

Table No 4 (continued)

## Sei-whales.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females			males.	females.	
40	1	1	2	55	—	31	31
41	2	1	3	56	—	5	5
42	4	2	6	57	—	2	2
43	8	1	9	66	—	1	1
44	8	5	13	Sum	505	555	1,060
45	26	7	33	Average size { Males: 48.08 feet Females: 50.84 „ Total animals: 49.53 „  Per cent { Males: 47.64 „ Females: 52.36 „			
46	41	19	60				
47	94	27	121				
48	97	43	140				
49	108	49	157				
50	70	78	148				
51	26	80	106				
52	15	87	102				
53	5	66	71				
54	—	50	50				

## Sperm-whales.

Engl. feet.	Number of males	Engl. feet.	Number of males.
41	2	48	14
42	2	49	10
43	5	50	9
44	8	51	6
45	6	52	4
46	8	53	3
47	9	54	2
Sum		88	

Average size: Males: 47.58 feet.

Table No. 4 (continued).

**b. Antarctic, pelagic whaling**  
**Blue-whales.**

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
61	—	1	1	83	15	22	37
62	1	—	1	84	7	27	34
63	—	1	1	85	6	18	24
64	1	1	2	86	2	22	24
65	2	3	5	87	2	17	19
66	1	5	6	88	—	13	13
67	7	5	12	89	—	8	8
68	8	6	14	90	—	9	9
69	11	4	15	91	—	5	5
70	68	56	124	92	—	1	1
71	53	42	95	93	—	1	1
72	50	63	113	94	—	3	3
73	65	50	115	95	—	1	1
74	55	34	89				
75	45	36	81	Sum	574	654	1,228
76	38	44	82				
77	39	38	77				
78	29	35	64	Average size	{ Males: 74.52 feet		
79	26	24	50		{ Females: 77.04 "		
80	22	24	46		{ Total animals: 75.86 "		
81	12	19	31	Per cent	{ Males: 46.74 "		
82	9	16	25		{ Females: 53.26 "		

**Fin-whales.**

49	—	2	2	72	215	1,017	1,232
50	2	5	7	73	98	1,019	1,117
51	5	4	9	74	57	818	875
52	9	6	15	75	25	715	740
53	17	23	40	76	4	457	461
54	41	26	67	77	3	286	289
55	58	45	103	78	2	146	148
56	27	24	51	79	3	68	71
57	489	404	893	80	—	41	41
58	522	439	961	81	—	8	8
59	479	396	875	82	—	7	7
60	575	521	1,096	83	—	1	1
61	577	430	1,007	85	—	1	1
62	644	456	1,100	86	1	—	1
63	793	505	1,298	Sum	12,735	13,536	26,271
64	926	530	1,456				
65	1,144	563	1,707				
66	1,196	541	1,737	Average size	{ Males: 64.99 feet		
67	1,292	639	1,931		{ Females: 68.13 "		
68	1,275	668	1,943		{ Total animals: 66.61 "		
69	975	740	1,715	Per cent	{ Males: 48.48 "		
70	801	966	1,767		{ Females: 51.52 "		
71	480	1,019	1,499				

Table No. 4 (continued).

## Humpbacks.

Engl. feet.	Number of		Total animals.	Engl. feet.	Number of		Total animals.
	males.	females.			males.	females.	
30	1	—	1	46	4	54	58
31	—	1	1	47	5	29	34
32	—	2	2	48	—	20	20
33	6	3	9	49	1	12	13
34	4	5	9	50	1	5	6
35	33	19	52	51	—	5	5
36	40	34	74	53	1	1	2
37	47	39	86	Sum	568	764	1,332
38	64	44	108	Average size	Males:	39.78 feet	,,
39	76	67	143			Females:	
40	65	73	138	Total animals:		40.93	
41	70	72	142	Per cent	Males:	42.64	,,
42	56	71	127			Females:	
43	46	71	117				
44	29	82	111				
45	19	55	74				

## Sei-whales.

40	3	2	5	55	10	123	133	
41	10	1	11	56	3	72	75	
42	3	5	8	57	2	20	22	
43	7	6	13	58	—	7	7	
44	24	11	35	59	—	1	1	
45	39	25	64	61	—	1	1	
46	88	51	139	Sum	1,038	2,181	3,219	
47	137	71	208	Average size	Males:	48.73 feet	,,	
48	160	133	293			Females:		51.27
49	155	201	356			Total animals:		50.45
50	190	280	470	Per cent	Males:	32.25	,,	
51	105	350	455			Females:		67.75
52	60	333	393					
53	27	285	312					
54	15	203	218					

## Sperm-whales.

38	7	3	10	52	178	—	178	
39	28	—	28	53	108	—	108	
40	50	3	53	54	61	—	61	
41	95	—	95	55	35	—	35	
42	149	—	149	56	9	—	9	
43	201	—	201	57	3	—	3	
44	282	—	282	Sum	4,121	6	<sup>1)</sup> 4,128	
45	428	—	428	Average size	Males:	47.29 feet	,,	
46	434	—	434			Females:		39.00
47	439	—	439			Total animals:		47.26
48	507	—	507	Per cent	Males:	99.85	,,	
49	443	—	443			Females:		0.15
50	400	—	<sup>1)</sup> 401					
51	264	—	264					

<sup>1)</sup> Incl. one hermaphrodite sperm-whale of 50 feet.

**Table No. 5.—Whales caught in the Antarctic in the season 1959/60.  
by species, sex and groups of size.**

**Total Antarctic.  
Blue-whales.**

	Number of whales.	Per cent.
Group 1. (70 feet and less) .....	184	14.88
„ 2. (71 feet to and incl. 85 feet) .....	968	78.25
„ 3. (above 85 feet) .....	85	6.87
	1,237	100.00
Immature males .....	270	46.79
„ females .....	355	53.79
„ animals .....	625	50.53
Mature males .....	307	53.21
„ females .....	305	46.21
„ animals .....	612	49.47

**Fin-whales.**

	Number of whales.	Per cent.
Group 1. (55 feet and less) .....	255	0.93
„ 2. (56 feet to and incl. 65 feet) .....	10,931	39.87
„ 3. (above 65 feet) .....	16,228	59.20
	27,414	100.00
Immature males .....	3,604	27.34
„ females .....	4,042	28.40
„ animals .....	7,646	27.89
Mature males .....	9,576	72.66
„ females .....	10,192	71.60
„ animals .....	19,768	72.11

**a. South Georgia.  
Blue-whales.**

	Number of whales.	Per cent.
Group 1. (70 feet and less) .....	3	33.33
„ 2. (71 feet to and incl. 85 feet) .....	5	55.56
„ 3. (above 85 feet) .....	1	11.11
	9	100.00
Immature males .....	3	100.00
„ females .....	4	66.67
„ animals .....	7	77.78
Mature males .....	—	—
„ females .....	2	33.33
„ animals .....	2	22.22

Table No. 5 (continued).

## Fin-whales.

	Number of whales.	Per cent.
Group 1. (55 feet and less) .....	12	1.05
„ 2. (56 feet to and incl. 65 feet) .....	487	42.61
„ 3. (above 65 feet) .....	644	56.34
	1,143	100.00
Immature males .....	159	35.73
„ females .....	226	32.38
„ animals .....	385	33.68
Mature males .....	286	64.27
„ females .....	472	67.62
„ animals .....	758	66.32

## b. Antarctic, pelagic whaling.

## Blue-whales.

	Number of whales.	Per cent.
Group 1. (70 feet and less) .....	181	14.74
„ 2. (71 feet to and incl. 85 feet) .....	963	78.42
„ 3. (above 85 feet) .....	84	6.84
	1,228	100.00
Immature males .....	267	46.52
„ females .....	351	56.67
„ animals .....	618	50.33
Mature males .....	307	53.48
„ females .....	303	43.33
„ animals .....	610	49.67

## Fin-whales.

	Number of whales.	Per cent.
Group 1. (55 feet and less) .....	243	0.92
„ 2. (56 feet to and incl. 65 feet) .....	10,444	39.76
„ 3. (above 65 feet) .....	15,584	59.32
	26,271	100.00
Immature males .....	3,445	27.05
„ females .....	3,816	28.19
„ animals .....	7,261	27.64
Mature males .....	9,290	72.95
„ females .....	9,720	71.81
„ animals .....	19,010	72.36

**Table No. 6.—Average production of oil per blue-whale unit in the Antarctic in the season 1959/60.**

Other whales are reduced to blue-whale equivalents on the following basis:—

1 blue-whale = 2 fin-whales = 2½ humpbacks = 6 sei-whales.

Geographical areas.	Company.	Blue-whale units. <sup>1)</sup>	Oil production.	
			Total.	Average per blue-whale unit.
			Barrels <sup>2</sup>	Barrels <sup>2</sup>
<i>South Georgia</i> .....	No. 1	307.7	38,670	125.7
	.. 2	239.7	29,117	121.5
	.. 3	209.8	25,360	120.9
	Total	757.2	93,147	123.0
<i>Antarctic, pelagic whaling</i> .....	No. 1	540.2	80,298	148.6
	.. 2	745.4	109,397	146.8
	.. 3	477.4	67,598	141.6
	.. 4	455.7	63,106	138.5
	.. 5	1,032.5	141,031	136.6
	.. 6	605.0	76,022	125.7
	.. 7	760.5	94,527	124.3
	.. 8	489.5	60,670	123.9
	.. 9	646.0	79,854	123.6
	.. 10	1,624.0	198,344	122.1
	.. 11	482.1	58,599	121.5
	.. 12	816.0	98,682	120.9
	.. 13	1,165.0	139,559	119.8
	.. 14	790.7	94,038	118.9
	.. 15	414.6	45,068	108.7
	.. 16	558.0	60,000	107.5
	.. 17	930.5	96,529	103.7
	.. 18	1,119.6	115,953	103.6
	.. 19	892.7	91,265	102.2
	.. 20	887.6	88,835	100.1
	Total	15,433.0	1,859,375	120.5

<sup>1)</sup> This refers to whales worked up. <sup>2)</sup> Barrel = 170 kg. (Barrel = abt. 1/4 long ton, 1 long ton = 1,016 kg.)

**Table No. 7.—Size of pregnant whale females caught in the Antarctic in the season 1959/60.**

**Blue-whale females.**

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		
70	6	83	12	Number of foetuses measured..... 156 Total number of blue-whale females measured 660, of which pregnant animals 155, or 23.48 per cent. Total number of mature blue-whale females (above 76 feet) measured 305, of which pregnant animals 113, or 37.05 per cent.
71	5	84	16	
72	7	85	7	
73	8	86	11	
74	7	87	12	
75	5	88	7	
76	4	89	5	
77	4	90	7	
78	4	91	1	
79	4	92	1	
80	4	93	1	
81	9	94	2	
82	5	95	1	
		Total	155	

Table No. 7 (continued).

## Fin-whale females.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		Number of foetuses meas- ured . . . . . 5,489
53	1	72	598	of which twin pairs . . . . . 52
58	2	73	651	» triplets . . . . . 2
60	6	74	555	Total number of fin-whale fe- males measured 14,234, of which pregnant animals 5,433, or 38.17 per cent.
61	11	75	462	Total number of mature fin- whale females (above 64 feet) measured 10,192, of which preg- nant animals 5,260, or 51.61 per cent.
62	14	76	316	
63	45	77	198	
64	94	78	98	
65	109	79	40	
66	163	80	31	
67	254	81	5	
68	306	82	5	
69	367	83	1	
70	508	85	1	
71	592	Total	5,433	

## Humpback females.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		Number of foetuses meas- ured . . . . . 374
36	2	45	38	of which twin pairs . . . . . 2
37	5	46	31	Total number of humpback fe- males measured 764, of which pregnant animals 372, or 48.69 per cent.
38	13	47	19	Total number of mature hump- back females (above 40 feet) meas- ured 477, of which pregnant ani- mals 290, or 60.80 per cent.
39	25	48	11	
40	37	49	7	
41	36	50	4	
42	44	51	3	
43	42	53	1	
44	54	Total	372	

## Sei-whale females.

Length of mothers.	Number of pregnant animals.	Length of mothers.	Number of pregnant animals.	
Engl. feet.		Engl. feet.		Total number of foetuses measured . . . . . 1,225
42	1	52	199	of which twin pairs . . . . . 16
43	1	53	175	
44	2	54	122	
45	8	55	81	
46	18	56	37	
47	23	57	10	
48	63	58	3	
49	93	61	1	
50	169	Total	1,209	
51	203			

## Sperm-whale females.

1 pregnant animal of 38 feet. — Number of foetuses measured 1.



**Table No. 8.—Whale foetuses measured in the Antarctic in the season 1959/60, by species and groups of size, in each month.**

**Blue-whale foetuses.**

Groups of size. Engl. feet.	October	February	March	April	Total
1'—1' 11" .....	1	1	1	—	3
5'—5' 11" .....	—	4	2	—	6
6'—6' 11" .....	—	2	—	—	2
7'—7' 11" .....	—	5	1	—	6
8'—8' 11" .....	—	4	—	—	4
9'—9' 11" .....	—	2	1	—	3
10'—10' 11" .....	—	5	2	—	7
11'—11' 11" .....	—	7	5	—	12
12'—12' 11" .....	—	9	9	—	18
13'—13' 11" .....	—	5	11	—	16
14'—14' 11" .....	—	5	4	—	9
15'—15' 11" .....	—	5	10	1	16
16'—16' 11" .....	—	6	6	1	13
17'—17' 11" .....	—	4	9	—	13
18'—18' 11" .....	—	2	7	—	9
19'—19' 11" .....	—	—	2	—	2
20'—20' 11" .....	—	2	4	2	8
21'—21' 11" .....	—	1	2	1	4
22'—22' 11" .....	—	2	1	—	3
24'—24' 11" .....	—	—	1	1	2
Total blue-whale foetuses .....	1	71	78	6	156
Average size of foetuses .....	1' 6"	12' 4"	15' 0"	19' 4"	13' 9"

**Fin-whale foetuses.**

Groups of size. Engl. feet.	Oct.	Nov.	Dec.	Jan.	Febr.	March	April	Total
Less than 1' .....	3	—	4	43	5	1	—	56
1'—1' 11" .....	12	5	38	80	24	4	1	164
2'—2' 11" .....	18	2	45	159	59	11	2	296
3'—3' 11" .....	22	12	68	201	63	15	4	385
4'—4' 11" .....	10	7	65	245	97	26	7	457
5'—5' 11" .....	4	10	89	269	116	50	7	545
6'—6' 11" .....	—	2	57	296	128	52	14	549
7'—7' 11" .....	—	—	67	266	153	52	7	545
8'—8' 11" .....	—	—	38	251	154	68	6	517
9'—9' 11" .....	—	—	24	175	167	57	8	431
10'—10' 11" .....	—	—	7	140	144	84	17	392
11'—11' 11" .....	—	—	2	54	111	61	7	235
12'—12' 11" .....	—	—	3	46	147	71	16	283
13'—13' 11" .....	—	—	—	18	72	54	7	151
14'—14' 11" .....	—	—	—	5	64	63	13	145
15'—15' 11" .....	1	—	—	4	32	60	13	110
16'—16' 11" .....	—	—	—	—	27	48	13	88
17'—17' 11" .....	—	—	—	—	16	36	13	65
18'—18' 11" .....	1	—	—	1	4	21	4	31
19'—19' 11" .....	—	—	—	1	3	12	10	26
20'—20' 11" .....	—	—	—	—	1	7	4	12
21'—21' 11" .....	—	—	—	1	1	—	3	5
22'—22' 11" .....	—	—	—	—	—	1	—	1
Total fin-whale foetuses .....	71	38	507	2,255	1,588	854	176	5,489
Average size of foetuses .....	3' 0"	3' 7"	5' 1"	6' 3"	8' 8"	11' 0"	11' 9"	7' 8"

Table No. 8 (continued)

## Humpback foetuses.

Groups of size.	Jan.	Febr.	Total.
Engl. feet.			
Less than 1' .....	7	—	7
1'—1' 11" .....	67	3	70
2'—2' 11" .....	122	6	128
3'—3' 11" .....	121	11	132
4'—4' 11" .....	27	7	34
5'—5' 11" .....	3	—	3
Total humpback foetuses .....	347	27	374
Average size of foetuses .....	2' 6"	3' 1"	2' 6"

## Sei-whale foetuses.

Groups of size	Dec.	Jan.	Febr.	March.	April.	Total.
Less than 1' .....	—	—	1	—	—	1
2'—2' 11" .....	—	2	3	1	—	6
3'—3' 11" .....	—	12	10	—	1	23
4'—4' 11" .....	—	16	24	6	1	47
5'—5' 11" .....	2	31	23	11	—	67
6'—6' 11" .....	—	37	65	13	1	116
7'—7' 11" .....	1	74	91	25	1	192
8'—8' 11" .....	2	65	142	25	1	235
9'—9' 11" .....	—	15	176	46	2	239
10'—10' 11" .....	—	4	89	57	4	154
11'—11' 11" .....	—	1	28	51	3	83
12'—12' 11" .....	—	—	6	24	4	34
13'—13' 11" .....	—	—	3	10	—	13
14'—14' 11" .....	—	—	—	8	4	12
15'—15' 11" .....	—	—	—	3	—	3
Total sei-whale foetuses .....	5	257	661	280	22	1,225
Average size of foetuses .....	6' 7"	6' 9"	8' 3"	9' 8"	10' 1"	8' 4"

## Sperm-whale foetuses.

1 of the size 1'—1' 11" measured in March.

Table No. 9.—Whale foetuses measured in the Antarctic in the season 1959/60, by species and sex, in each month.

Kind of foetuses. Months.	Number of		Sex not stated.	Total foetuses.	Number of males per 100 females.
	males.	females.			
<b>Blue-whale foetuses.</b>					
October .....	—	1	—	1	—
February .....	37	34	—	71	108.82
March .....	36	42	—	78	85.71
April .....	4	2	—	6	200.00
Total	77	79	—	156	97.47

Table No. 9 (continued).

Kind of foetuses. Months.	Number of		Sex not stated.	Total foetuses.	Number of males per 100 females.
	males.	females.			
<b>Fin-whale foetuses.</b>					
October .....	43	28	—	71	153.57
November .....	21	17	—	38	123.53
December .....	262	245	—	507	106.94
January .....	1,103	1,143	9	2,255	97.50
February .....	772	812	4	1,588	95.07
March .....	425	429	—	854	99.07
April .....	75	101	—	176	74.26
Total	2,701	2,775	13	5,489	97.33
<b>Humpback foetuses.</b>					
January .....	185	161	1	347	114.91
February .....	17	10	—	27	170.00
Total	202	171	1	374	118.13
<b>Sei-whale foetuses.</b>					
December .....	3	2	—	5	150.00
January .....	136	121	—	257	112.40
February .....	308	351	2	661	87.75
March .....	127	152	1	280	83.55
April .....	9	13	—	22	69.23
Total	583	639	3	1,225	91.24
<b>Sperm-whale foetuses.</b>					
March .....	—	1	—	1	—

