

INTERNATIONAL
WHALING STATISTICS
LXXII

EDITED BY
THE COMMITTEE FOR WHALING STATISTICS



OSLO 1973

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PREFACE

The present publication, International Whaling Statistics No. LXXII, embraces the results of the Antarctic whaling during the season 1972/73.

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

Oslo, December 1973.

Birger Bergersen.

Einar Vangstein.

INTRODUCTION

In all postwar seasons up to and including 1971/72 the pelagic catch of baleen whales in the Antarctic has been limited by quotas which have been expressed in blue-whale units. One blue whale unit equals to 1 blue whale or 2 fin whales or 2½ humpback whales or 6 sei whales.

At the 24th meeting of the International Whaling Commission held in London in 1972 quotas were set for individual species. The quotas for the 1972/73 season for species of baleen whales being allowed to catch were set at:

Fin whales	1,950
Sei/Bryde's whales	5,000
Minke whales	5,000

By voluntary agreement between Japan, U.S.S.R. and Norway the total quotas for fin whales and sei/Bryde's whales were allocated into national quotas.

The national quotas and the actual catches were the following:

	Japan	U.S.S.R.	Norway	Total
Fin whales				
Quotas	1,142	768	40	1,950
Catch	1,142	619	—	1,761
Sei/Bryde's whales				
Quotas	2,919	1,961	120	5,000
Catch	2,919	945	—	3,864

Norway had no expeditions in the Antarctic in the 1972/73 season.

No national quotas were set for minke whales. According to Schedule 8 c the Bureau of International Whaling Statistics is responsible for determining the date on which the minke whale quota is supposed to be reached, based upon the data referred to in the Schedule, which are the weekly and later on the daily catch information sent to the Bureau during the season.

On January 2nd 4,250 minke whales were reported caught, and the average catch per day was 110 whales. The remaining 750 minke whales would thus be expected to be caught in 7 days. The closing date for the catch of minke whales was therefore set to January 9th. However, during the last 7 days the average catch per day increased from 110 to 214, and consequently about 750 minke whales more than the stipulated catch limit were taken.

At the 24th meeting the Southern Hemisphere quotas for sperm whales were set at 8,000 males and 5,000 females for the 1972/73 pelagic season and the 1973 coastal season combined.

Japan and U.S.S.R. agreed to limit the number of sperm whales to be caught by Antarctic pelagic expeditions operating both south and north of 40° South to:

	Male	Female	Total
Japan	1,200	690	1,890
U.S.S.R.	5,000	2,900	7,900
Total	6,200	3,590	9,790

The catch amounted to:

	Male	Female	Total
Japan	445	398	843
U.S.S.R.	4,998	2,900	7,898
Total	5,443	3,298	8,741

Two sperm whales not included in the table were reported lost by U.S.S.R. expeditions, and one by Japanese expeditions.

Other important regulations governing the pelagic whaling in the Antarctic in the 1972/73 season were the following:

1. The open season for the taking of fin, sei and Bryde's whales was from December 12th to April 7th, both days inclusive.
2. The open season for the taking of sperm whales was 8 months.
3. The open season for the taking of minke whales was 6 months.
4. It was forbidden to take fin whales under 57 feet, sei and Bryde's whales under 40 feet and sperm whales under 30 feet. Further, it was forbidden to kill blue whales, humpback whales, right whales, and female whales accompanied by a calf.

In the 1972/73 season 4 Japanese and 3 U.S.S.R. expeditions operated with a total of 82 catchers. One of the Japanese expeditions caught minke whales only. The expeditions produced 177,805 barrels of whale oil and 167,734 barrels of sperm oil.

The total catch and production of oil in the last two seasons are shown in table a. (Corresponding figures for the seasons 1961/62 — 1970/71, see table c page 10, publication No. LXVIII.)

In the Antarctic 4,203 sperm whales were caught. In addition some of the expeditions hunted sperm whales in the waters north of 40° South latitude on their voyages to and from the Antarctic. The total catch of sperm whales was the following:

	On voyage to Antarctic N. of 40° S.		In Antarctic S. of 40° S.		On voyage from Antarctic N. of 40° S.		Total	
	No. sperm whales	Oil prod.	No. sperm whales	Oil prod.	No. sperm whales	Oil prod.	No. sperm whales	Oil prod.
Japan	711	15,676	132	4,324	—	—	843	20,000
U.S.S.R. . . .	950	27,876	4,071	163,410	2,879	59,565	7,900	250,851
	1,661	43,552	4,203	167,734	2,879	59,565	8,743	270,851

The distribution of whales caught south of 40° South by series was the following:

	Fin whale	Sei/Bryde's whale	Minke whale	Sperm whale
Serie D, 40—50° S. Lat.	808	3,633	—	2,062
Serie A, 50—60° S. Lat.	679	151	76	648
Serie B, 60—70° S. Lat.	274	79	5,668	1,491
	1,761	3,863 ¹⁾	5,744 ¹⁾	4,201 ²⁾

The distribution of whales caught south of 40° South by areas was the following:

	Fin whale	Sei/Bryde's whale	Minke whale	Sperm whale
Area I, 120° W— 60° W	36	460	—	150
Area II, 0 — 60° W	124	98	—	701
Area III, 0 — 70° E	875	600	1,187	1,322
Area IV, 70° E—130° E	290	1,685	4,557	627
Area V, 130° E—170° W	128	943	—	1,038
Area VI, 170° W—120° W	308	77	—	363
	1,761	3,863	5,744	4,201

Tables b and c show the monthly catches of various species of whales exclusive minke whales in absolute and percentage figures. The catch of minke whales by month was November 604, December 3,453, January 1,687, Total 5,744.

¹⁾ Excl. 1 whale lost. ²⁾ Excl. 2 whales lost.

The average sizes of the different species and sexes of whales caught in different areas were the following:

	Fin whales			Sei whales			Minke whales			Sperm whales		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet	Engl. feet
Area I	65.1	63.3	64.7	48.1	49.9	48.8	—	—	—	48.4	—	48.4
Area II	65.3	68.1	66.7	46.7	48.3	47.7	—	—	—	42.2	34.2	40.9
Area III	65.0	68.3	66.8	46.4	47.7	47.0	26.7	27.4	27.1	46.0	33.2	45.9
Area IV	64.8	67.6	66.2	47.1	48.2	47.6	26.2	27.0	26.6	48.1	33.4	47.2
Area V	63.9	65.9	64.9	46.2	47.5	46.8	—	—	—	44.8	36.0	43.8
Area VI	64.2	66.1	65.0	48.2	49.5	48.9	—	—	—	40.3	35.4	40.0
Total	64.7	67.7	66.2	46.9	48.2	47.5	26.3	27.1	26.7	45.1	34.8	44.3

Table d shows for each species and sex the average sizes of the total number of whales caught in the Antarctic, table e the whaling results for the various countries, and table f the production of by-products. The three tables also include data for the 1971/72 season. Corresponding data for the seasons 1961/62 — 1970/71 will be found in publication No. LXVIII, tables h, i, and k.

Table a. - Pelagic whaling in the Antarctic.

Years	Species of whales caught								Oil production Barrels	Expeditions	
	Blue	Fin	Hump- back	Sei/ Bryde's	Minke	Sperm	Others	Total		Floating factories	Catch- ers
1971/72	—	2,683	3	5,456	3,021	3,366		14,529	387,064	7	89 ¹⁾
1972/73	7	1,761	5	3,864	5,745	4,203		15,585	345,539	7	82

¹⁾ Including 1 combined floating factory/catcher.

Table b. - 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
Total animals								
} 1971/72	216	2,898	3,797	2,307	2,008	267	11,493	11,505
} 1972/73	242	2,284	2,821	2,342	1,650	486	9,825	9,828
Fin whales								
} 1971/72	—	153	604	1,061	861	4	2,683	2,683
} 1972/73	—	89	225	1,148	299	—	1,761	1,761
Sei/Bryde's whales								
} 1971/72	—	2,348	2,098	540	441	28	5,455	5,456
} 1972/73	—	1,347	1,681	488	346	1	3,863	3,864
Sperm whales								
} 1971/72	216	397	1,095	706	706	235	3,355	3,366
} 1972/73	242	848	915	706	1,005	485	4,201	4,203

Table c. - 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
Total animals } 1971/72	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
}
Fin whales } 1971/72	—	5.3	15.9	46.0	42.9	1.5	23.3	23.3
} 1972/73	—	3.9	8.0	49.0	18.1	—	17.9	17.9
Sei/Bryde's } 1971/72	—	81.0	55.3	23.4	22.0	10.5	47.5	47.4
} 1972/73	—	59.0	59.6	20.8	21.0	0.2	39.3	39.3
Sperm whales } 1971/72	100.0	13.7	28.8	30.6	35.1	88.0	29.2	29.3
} 1972/73	100.0	37.1	32.4	30.2	60.9	99.8	42.8	42.8

Table d. - Average size of whales killed in the Antarctic, by species of whales.

	Fin whales			Sei whales			Minke whales			Sperm whales		
	Males Engl. feet	Fe- males Engl. feet	Total Engl. feet	Males Engl. feet	Fe- males Engl. feet	Total Engl. feet	Males Engl. feet	Fe- males Engl. feet	Total Engl. feet	Males Engl. feet	Fe- males Engl. feet	Total Engl. feet
1971/72	64.3	67.0	65.7	46.4	47.9	47.1	27.3	28.5	28.0	45.0	37.5	44.7
1972/73	64.7	67.7	66.2	46.9	48.2	47.5	26.3	27.1	26.7	45.1	34.8	44.3

Table e. - Antarctic, pelagic whaling results for the various countries.

	All countries			Japan			Norway			U.S.S.R.		
	Number of whales killed	Oil pro- duction	Catchers employed	Number of whales killed	Oil pro- duction	Catchers employed	Number of whales killed	Oil pro- duction	Catchers employed	Number of whales killed	Oil pro- duction	Catchers employed
		Barrels			Barrels			Barrels			Barrels	
1971/72 ..	14,529	387,064	89	8,711	159,610	41	3	36	1 ¹⁾	5,815	227,418	47
1972/73 ..	15,585	345,539	82	6,285	119,307	35	—	—	—	9,300	226,232	47

¹⁾ Combined catcher/floating factory.

Table f. - Production of by-products in the Antarctic.

By-products Seasons Countries	Whale meat-meal, bone-meal, grax meal, guano	Whale liver or liver flakes	Liver oil Mill. units Vitamin A	Whale meat, blubber, ventral grooves	Whale solubles	Other products
	L. tons	L. tons		L. tons	L. tons	L. tons
1971/72	13,397	1,791	1,253,000	104,438	1,574	1,211
1972/73						
Japan	522	—	—	59,684	1,624	10,119
U.S.S.R.	12,901	1,516	1,915,000	27,700	—	2,097
Total	13,423	1,516	1,915,000	87,384	1,624	12,216

TABLES

Antarctic season 1972/73.

Table 1. - Whaling results for the various countries in the Antarctic in the season 1972/73.

Pelagic whaling.

Countries	Species of whales caught							Oil production. Barrels of 170 kg	Expeditions	
	Blue	Fin	Hump-back	Sei	Minke	Sperm	Total		Floating factories	Catchers
Japan	—	1,142	—	2,919	2,092	132	6,285	119,307	4	35
U.S.S.R.	¹⁾⁷	619	¹⁾⁵	²⁾⁹⁴⁵	3,653	4,071	^{3)9,300}	226,232	3	47
Total	7	1,761	5	3,864	5,745	4,203	15,585	345,539	7	82

¹⁾ Taken under special permit according to Whaling Convention article VIII.

²⁾ Incl. 5 Bryde's whales.

³⁾ In addition 27 bottlenoses and 15 killer whales.

Table 2. — Average size of whales caught in the Antarctic in the season 1972/73.

Pelagic whaling.

Number of whales measured.		Company.	Average size.		
			Males.	Females.	Total.
Fin whales.					
Males 872	} Total 1,761	No. 1	65.7	69.5	67.9
Females 889		" 2	65.2	68.0	66.7
		" 3	64.2	66.2	65.1
		" 4	64.1	66.6	65.4
		" 5	65.2	67.6	66.3
		" 6	63.2	64.7	63.8
		Average		64.7	67.7
Sei whales.					
Males 2,082	} Total 3,862	No. 1	46.4	47.8	47.0
Females 1,780		" 2	47.8	49.3	48.4
		" 3	46.2	47.6	46.9
		" 4	45.9	46.3	46.1
		" 5	47.9	49.5	48.6
		" 6	46.7	48.3	47.7
		Average		46.9	48.2

Table No. 2 (continued).

Number of whales measured.	Company.	Average size.		
		Males.	Females.	Total.
Minke whales. Males 2,900 } Females 2,843 } Total 5,743 Average	No. 1	26.4	27.1	26.8
	" 2	26.7	27.5	27.2
	" 3	26.2	27.1	26.6
	Average	26.3	27.1	26.7
Sperm whales. Males 3,900 } Females 301 } Total 4,201 Average	No. 1	43.4	34.9	41.2
	" 2	45.9	33.4	45.5
	" 3	43.5	34.2	42.3
	" 4	45.2	36.2	44.7
	Average	45.1	34.8	44.3

Table 3.—Whales caught in the Antarctic in the season 1972/73, by species, sex and size.

Pelagic whaling.

Fin whales.

Engl. feet	Number of		Total	Engl. feet	Number of		Total
	males	females			males	females	
48	—	1	1	72	11	55	66
49	—	1	1	73	8	83	91
52	1	1	2	74	—	49	49
53	3	—	3	75	—	30	30
54	2	—	2	76	—	19	19
55	2	2	4	77	—	12	12
56	3	2	5	78	—	7	7
57	29	22	51	79	—	8	8
58	38	39	77	80	—	1	1
59	26	20	46	81	—	1	1
60	33	30	63	82	—	1	1
61	52	30	82				
62	55	42	97	Sum	872	889	1,761
63	71	45	116				
64	71	45	116				
65	63	40	103				
66	109	42	151	Average size:	{ Males 64.7 feet		
67	87	47	134		{ Females 67.7 "		
68	86	42	128		{ Total 66.2 "		
69	47	40	87	Per cent:	{ Males 49.5		
70	53	67	120		{ Females 50.5		
71	22	65	87				

Table No. 3 (continued).

Sei whales.

Engl. feet	Number of		Total	Engl. feet	Number of		Total
	males	females			males	females	
37	1	2	3	53	16	99	115
38	1	1	2	54	1	48	49
39	4	5	9	55	1	16	17
40	41	47	88	56	—	12	12
41	75	61	136	57	—	3	3
42	73	58	131				
43	118	86	204	Sum	2,082	1,780	3,862
44	131	91	222				
45	149	78	227				
46	216	108	324				
47	252	148	400	Average size:	{ Males 46.9 feet		
48	326	172	498		{ Females 48.2 »		
49	303	171	474		{ Total 47.5 »		
50	207	201	408	Per cent:	{ Males 53.9		
51	114	182	296		{ Females 46.1		
52	53	191	244				

Minke whales.

Engl. feet	Number of		Total	Engl. feet	Number of		Total
	males	females			males	females	
15	—	1	1	30	61	396	457
16	—	1	1	31	20	156	176
17	—	8	8	32	—	23	23
18	6	8	14	33	—	2	2
19	9	6	15				
20	24	27	51	Sum	2,900	2,843	5,743
21	59	60	119				
22	97	86	183				
23	125	140	265				
24	213	204	417	Average size:	{ Males 26.3 feet		
25	287	179	466		{ Females 27.1 „		
26	495	231	726		{ Total 26.7 „		
27	689	358	1,047	Per cent:	{ Males 50.5		
28	544	498	1,042		{ Females 49.5		
29	271	459	730				

Table No. 3 (continued).

Sperm whales.

Engl. feet	Number of		Total	Engl. feet	Number of		Total
	males	females			males	females	
30	2	2	4	49	438	—	438
31	17	16	33	50	355	—	355
32	17	18	35	51	198	—	198
33	39	35	74	52	118	—	118
34	49	57	106	53	35	—	35
35	66	64	130	54	13	—	13
36	87	49	136	55	3	—	3
37	100	31	131	56	3	—	3
38	115	21	136	57	1	—	1
39	142	6	148				
40	161	2	163	Sum	3,900	301	4,201
41	171	—	171				
42	160	—	160				
43	214	—	214				
44	188	—	188	Average size: {	Males 45.1 feet		
45	210	—	210		Females 34.8 "		
46	233	—	233		Total 44.3 "		
47	305	—	305	Per cent: {	Males 92.8		
48	460	—	460		Females 7.2		

Table 4.—Size of pregnant female whales caught in the Antarctic in the season 1972/73.

Pelagic whaling.

Fin whales.

Length	Number of pregnant females	Length	Number of pregnant females
61	1	74	24
62	2	75	17
63	6	76	9
64	13	77	9
65	15	78	4
66	21	79	3
67	18	81	1
68	25	82	1
69	21		
70	46	Total	358
71	39		
72	34		
73	49		

Number of foetuses measured 358

Sei whales.

Length	Number of pregnant females	Length	Number of pregnant females	
44	10	53	68	Number of foetuses measured 720 of which twin pairs 4
45	7	54	33	
46	20	55	10	
47	49	56	9	
48	86	57	1	
49	94			
50	112	Total	716	
51	99			
52	118			

Minke whales.¹⁾

Length	Number of pregnant females	Length	Number of pregnant females	
24	1	30	236	Number of foetuses measured 1,056 of which twin pairs 4
25	7	31	104	
26	45	32	14	
27	146	33	1	
28	247			
29	251	Total	1,052	

¹⁾ Exclusive of 878 females with no information on pregnancy.

Sperm whales.

Length	Number of pregnant females		
30	2		Number of foetuses measured 78
31	5		
32	9		
33	14		
34	14		
35	19		
36	7		
37	6		
38	2		
Total	78		

Table 5.—Whale fetuses measured in the Antarctic in the season 1972/73, by species and groups of size, in each month.

Pelagic whaling.

Fin whale fetuses.

Groups of size. Engl. feet	Dec.	Jan.	Febr.	March	Total
0'— 0' 11"	4	1	19	8	32
1'— 1' 11"	—	—	3	2	5
2'— 2' 11"	—	1	12	—	13
3'— 3' 11"	2	8	12	4	26
4'— 4' 11"	1	8	27	2	38
5'— 5' 11"	—	2	18	1	21
6'— 6' 11"	1	4	16	4	25
7'— 7' 11"	—	3	26	6	35
8'— 8' 11"	—	4	27	6	37
9'— 9' 11"	—	1	17	1	19
10'—10' 11"	—	3	15	5	23
11'—11' 11"	—	—	20	2	22
12'—12' 11"	—	2	6	4	12
13'—13' 11"	—	—	12	7	19
14'—14' 11"	—	—	4	6	10
15'—15' 11"	—	—	7	5	12
16'—16' 11"	—	—	1	4	5
17'—17' 11"	—	—	1	2	3
18'—18' 11"	—	—	1	—	1
Total	8	37	244	69	358
Average size	2' 4"	6' 0"	7' 5"	9' 3"	7' 6"

Sei whale fetuses.

Groups of size. Engl. feet	Dec.	Jan.	Febr.	March	Total
0'— 0' 11"	1	5	16	5	27
1'— 1' 11"	7	1	—	—	8
2'— 2' 11"	20	12	—	—	32
3'— 3' 11"	46	19	5	—	70
4'— 4' 11"	89	39	3	—	131
5'— 5' 11"	89	54	5	1	149
6'— 6' 11"	37	68	15	3	123
7'— 7' 11"	7	51	12	4	74
8'— 8' 11"	3	26	13	3	45
9'— 9' 11"	—	8	9	3	20
10'—10' 11"	—	2	9	7	18
11'—11' 11"	—	—	4	8	12
12'—12' 11"	—	—	2	8	10
13'—13' 11"	—	—	—	1	1
Total	299	285	93	43	720
Average size	4' 8"	5' 11"	6' 5"	8' 10"	5' 8"

Table No. 5 (continued).

Minke whale foetuses.

Groups of size. Engl. feet	Nov.	Dec.	Jan.	Total
0'—0' 11" ¹⁾	81	328	204	613
1'—1' 11"	20	150	140	310
2'—2' 11"	2	28	66	96
3'—3' 11"	—	7	17	24
4'—4' 11"	—	1	2	3
5'—5' 11"	—	—	—	—
6'—6' 11"	—	—	1	1
7'—7' 11"	—	—	1	1
8'—8' 11"	—	1	2	3
9'—9' 11"	1	2	—	3
10'—10' 11"	—	—	2	2
Total	104	517	435	1,056
Average size	0' 7"	0' 10"	1' 1"	0' 11"

¹⁾ Including very small foetuses (first stage) not measured.

Sperm whale foetuses.

Groups of size. Engl. feet	Nov.	Dec.	Jan.	Febr.	March	April	Total
0'—0' 11" ..	—	5	9	3	—	2	19
1'—1' 11" ..	—	1	—	—	3	2	6
2'—2' 11" ..	—	—	1	—	3	5	9
3'—3' 11" ..	—	—	—	—	3	4	7
4'—4' 11" ..	—	—	—	—	—	15	15
5'—5' 11" ..	—	—	—	—	—	5	5
6'—6' 11" ..	—	—	—	—	—	1	1
7'—7' 11" ..	—	—	—	—	—	—	—
8'—8' 11" ..	—	—	—	—	—	—	—
9'—9' 11" ..	—	—	—	—	—	—	—
10'—10' 11" ..	1	—	—	—	—	—	1
11'—11' 11" ..	2	—	3	—	1	—	6
12'—12' 11" ..	1	1	2	—	1	1	6
13'—13' 11" ..	—	—	1	—	2	—	3
Total	4	7	16	3	13	35	78
Average size ..	11' 5"	2' 2"	4' 7"	—	5' 3"	3' 11"	4' 4"

Table 6.—Whale foetuses measured in the Antarctic in the season 1972/73, by species and sex, in each month.

Pelagic whaling.

	Number of		Sex not determined	Total	Number of males per 100 females
	males	females			
Fin whale foetuses.					
December	2	2	4	8	100
January	20	16	1	37	125
February	111	114	19	244	97
March	31	30	8	69	103
Total	164	162	32	358	101
Sei whale foetuses.					
December	149	149	1	299	100
January	146	134	5	285	109
February	40	38	15	93	105
March	19	19	5	43	100
Total	354	340	26	720	104
Minke whale foetuses.					
November	29	53	22	104	55
December	225	197	95	517	114
January	142	167	126	435	85
Total	396	417	243	1,056	95
Sperm whale foetuses.					
November	2	2	—	4	
December	3	3	1	7	
January	5	3	8	16	
February	—	—	3	3	
March	10	3	—	13	
April	14	21	—	35	
Total	34	32	12	78	106

