

Document for Steering Group on Research Related to Conservation
of Large Whales in the Southern Oceans.

FINDING OF BLUE WHALES BY JARPA IN THE ANTARCTIC

The Institute of Cetacean Research
(Compiled by Koji Matsuoka)

A. Preliminary results in 1994/95 season

A.1 Special Monitoring Zone :165°E-170°W
(1994.12.3-1994.12.17)

Searching distance : 2,783.3 n.miles

Summary of sightings :

Species	Primary		Secondary	
	sch.	ind.	sch.	ind.
Minke whale	32	36	6	6
Dwarf minke whale	1	1	2	2
Like minke whale	6	6	2	2
Blue whale	1	1	-	-
Fin whale	5	7	-	-
Humpback whale	32	49	5	12
Right whale	-	-	-	-
Baleen whale	11	14	4	6
Sperm whale	20	20	5	6
S.bottlenose whale	11	24	-	-
Arnox's beaked whale	1	10	-	-
Mesoplodon spp.	2	28	-	-
Ziphid whales	16	29	-	-
Killer whale	8	51	1	6
Pilot whales	-	-	-	-
Hourglass dolphin	1	8	-	-
Unidentified dolphins	-	-	-	-
Unidentified whales	20	31	5	6

A.2 Entire research - West South Sub-area
(1994.12.18-1995.1.3)

Searching distance : 2,470.1 n.miles

Summary of sightings :

Species	Primary		Secondary	
	sch.	ind.	sch.	ind.
Minke whale	191	593	107	214
Dwarf minke whale	-	-	-	-
Like minke whale	10	12	8	17
Blue whale	9	15	3	5
Fin whale	11	53	3	17
Humpback whale	42	71	9	15
Right whale	-	-	-	-
Baleen whale	19	43	12	20
Sperm whale	63	65	10	13
S.bottlenose whale	29	52	3	6
Arnox's beaked whale	-	-	-	-
Mesoplodon spp.	1	1	-	-
Ziphid whales	69	95	6	12
Killer whale	8	89	-	-
Pilot whales	-	-	-	-
Hourglass dolphin	-	-	-	-
Unidentified dolphins	-	-	-	-
Unidentified whales	36	37	2	4

A.3 Entire research - West North Sub-area
(1995.1.4-1995.1.19)

Searching distance : 3,227.0 n.miles

Summary of sightings :

Species	Primary		Secondary	
	sch.	ind.	sch.	ind.
Minke whale	110	320	22	38
Dwarf minke whale	1	1	-	-
Like minke whale	12	12	2	2
Blue whale	-	-	-	-
Fin whale	8	23	2	3
Humpback whale	14	25	13	24
Right whale	-	-	-	-
Baleen whale	6	9	1	2
Sperm whale	6	6	2	2
S.bottlenose whale	14	21	8	12
Arnox's beaked whale	-	-	-	-
Mesoplodon spp.	1	15	1	2
Ziphid whales	16	23	3	6
Killer whale	5	35	2	4
Pilot whales	1	5	1	10
Hourglass dolphin	2	10	1	3
Unidentified dolphins	-	-	-	-
Unidentified whales	14	14	-	-

A.4 Entire research - East North Sub-area
(1995.1.20-1995.2.5)

Searching distance : 2,582.9 n.miles

Summary of sightings :

Species	Primary		Secondary	
	sch.	ind.	sch.	ind.
Minke whale	89	153	22	34
Dwarf minke whale	2	2	-	-
Like minke whale	3	3	3	4
Blue whale	-	-	-	-
Fin whale	26	71	8	27
Humpback whale	29	58	12	23
Right whale	-	-	-	-
Baleen whale	11	19	22	37
Sperm whale	28	28	5	5
S.bottlenose whale	14	30	1	1
Arnox's beaked whale	1	15	1	10
Mesoplodon spp.	2	6	0	0
Ziphid whales	45	80	5	21
Killer whale	5	34	1	6
Pilot whales	-	-	-	-
Hourglass dolphin	3	10	3	12
Unidentified dolphins	8	36	-	-
Unidentified whales	37	58	1	1

B. Sighting records of Blue whales since 1987/88

B.1 Area IV

year	Searching distance (n.miles)	Primary		Secondary		density indices*		Remarks
		sch.	ind.	sch.	ind.	sch.**	ind.***	
1987/88	8,482.4	0	0	0	0	0.00	0.00	a part
1989/90	16,382.1	5	9	1	1	0.04	0.06	
1991/92	18,204.5	3	3	1	1	0.02	0.02	
1993/94	17,932.7	5	9	1	1	0.03	0.06	

* : include the Secondary sightings
 ** : (no.sch./100n.miles)
 ***: (no.ind./100n.miles)

B.2 Area V

year	Searching distance (n.miles)	Primary		Secondary		density indices*		Remarks
		sch.	ind.	sch.	ind.	sch.**	ind.***	
1988/89	9,614.2	1	2	1	1	0.02	0.03	a part
1990/91	14,525.9	4	6	3	4	0.05	0.07	
1992/93	13,492.3	7	9	4	9	0.08	0.13	
1994/95	11,063.3	10	16	3	5	0.12	0.19	Preliminary

* : include the Secondary sightings
 ** : (no.sch./100n.miles)
 ***: (no.ind./100n.miles)

C. Sighting records of Fin whales since 1987/88

C.1 Area IV

year	Searching distance (n.miles)	Primary		Secondary		density indices*		Remarks
		sch.	ind.	sch.	ind.	sch.**	ind.***	
1987/88	8,482.4	3	3	2	2	0.06	0.06	a part
1989/90	16,382.1	11	32	1	2	0.07	0.21	
1991/92	18,204.5	14	62	3	8	0.09	0.38	
1993/94	17,932.7	9	26	1	2	0.06	0.16	

* : include the Secondary sightings

** : (no.sch./100n.miles)

***: (no.ind./100n.miles)

C.2 Area V

year	Searching distance (n.miles)	Primary		Secondary		density indices*		Remarks
		sch.	ind.	sch.	ind.	sch.**	ind.***	
1988/89	9,614.2	8	18	1	1	0.09	0.20	a part
1990/91	14,525.9	33	67	7	24	0.28	0.63	
1992/93	13,492.3	14	27	3	7	0.13	0.25	
1994/95	11,063.3	50	154	13	47	0.57	1.82	Preliminary

* : include the Secondary sightings

** : (no.sch./100n.miles)

***: (no.ind./100n.miles)

D. Sighting records of Humpback whales since 1987/88

D.1 Area IV

year	Searching distance (n.miles)	Primary		Secondary		density indices*		Remarks
		sch.	ind.	sch.	ind.	sch.**	ind.***	
1987/88	8,482.4	40	77	20	46	0.71	1.45	a part
1989/90	16,382.1	126	219	30	58	0.95	1.69	
1991/92	18,204.5	194	351	33	61	1.25	2.26	
1993/94	17,932.7	134	221	38	70	0.96	1.62	

* : include the Secondary sightings

** : (no.sch./100n.miles)

***: (no.ind./100n.miles)

D.2 Area V

year	Searching distance (n.miles)	Primary		Secondary		density indices*		Remarks
		sch.	ind.	sch.	ind.	sch.**	ind.***	
1988/89	9,614.2	1	2	0	0	0.01	0.02	a part
1990/91	14,525.9	60	93	49	76	0.75	1.16	
1992/93	13,492.3	28	56	10	17	0.28	0.54	
1994/95	11,063.3	117	168	39	74	1.41	2.19	Preliminary

* : include the Secondary sightings

** : (no.sch./100n.miles)

***: (no.ind./100n.miles)

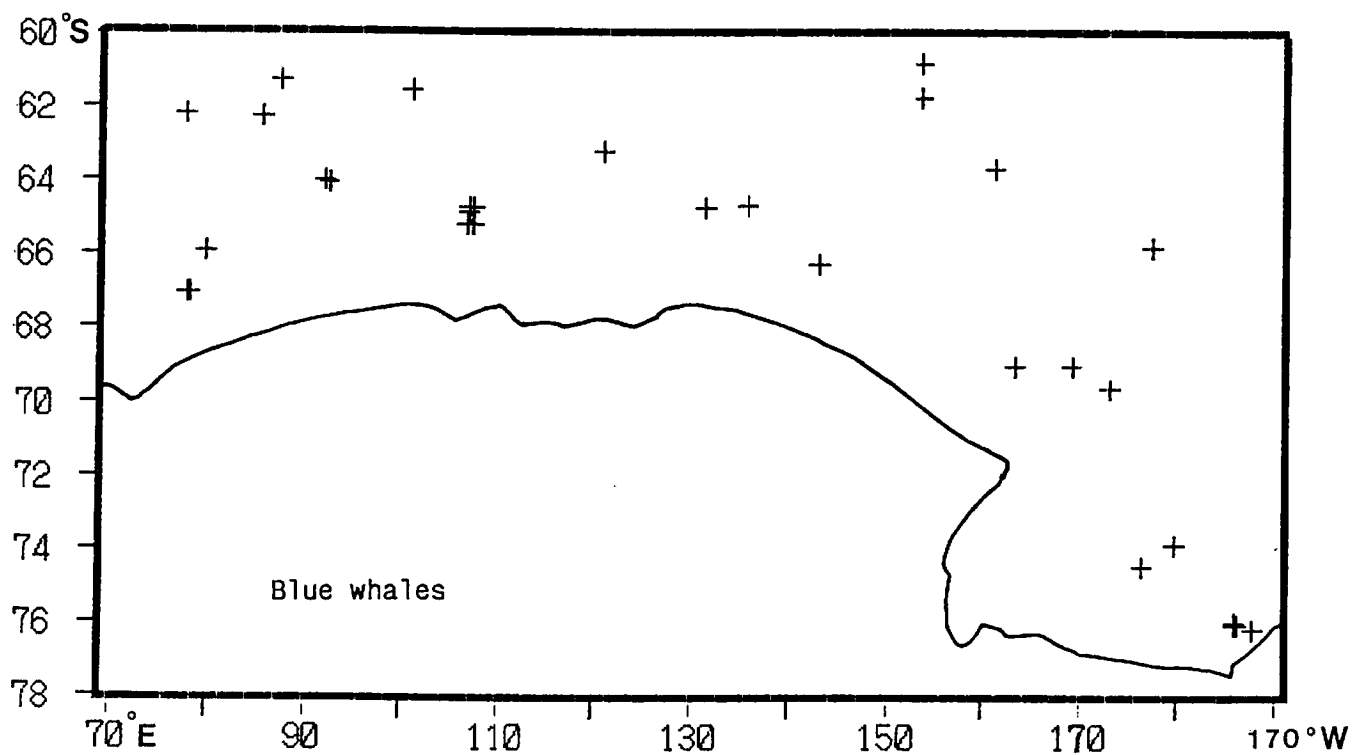


FIG.1. Positions of Blue whale schools found (1987/88 - 1993/94).

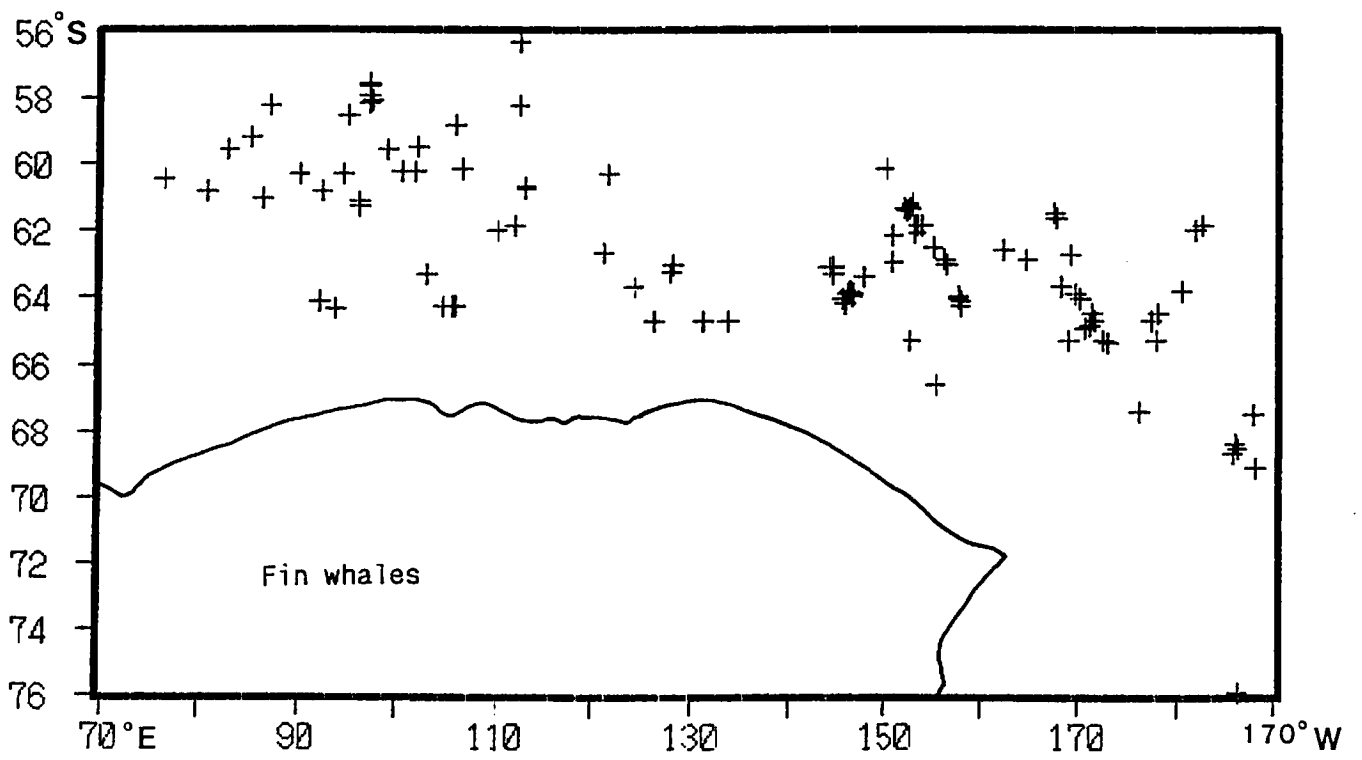


FIG.2. Positions of Fin whale schools found (1987/88 - 1993/94).

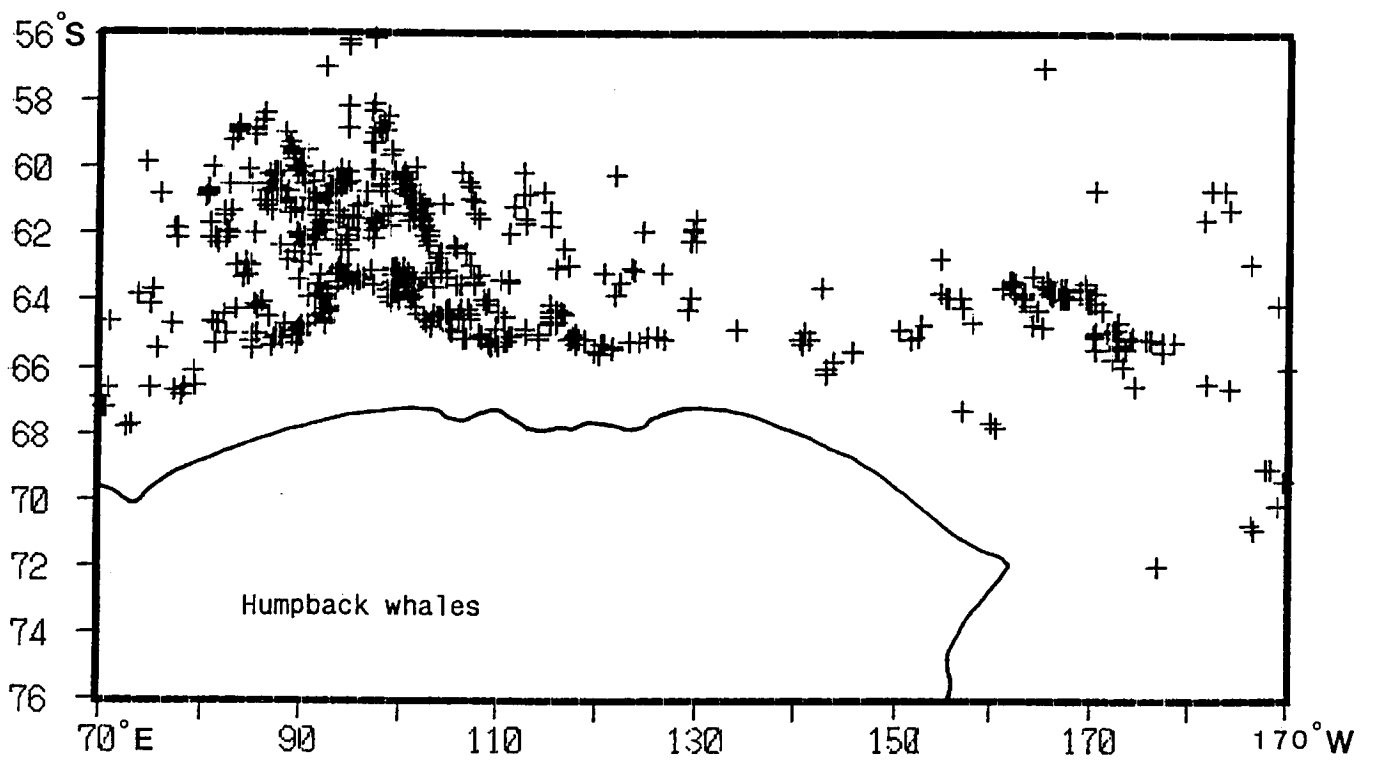


FIG.3. Positions of Humpback whale schools found (1987/88 - 1993/94).