

Japan's Scientific Progress Report on Large Cetaceans in the fiscal year 2024 (April 2024 to March 2025), with statistical data for the calendar year 2024

Government of Japan

ABSTRACT

This document summarizes the data and samples of large cetaceans, which were collected by the Institute of Cetacean Research (ICR), Fisheries Resources Institute (FRI) and Fisheries Agency of Japan (FAJ) in the fiscal year 2024 (April 2024 to March 2025), and statistical data for the calendar year 2024. Sighting data for abundance estimates of large cetaceans were collected in the North Pacific, Sea of Okhotsk, Sea of Japan and the Antarctic during systematic sighting surveys. During the surveys, photo-ID, biopsy and satellite tracking experiments on large cetaceans were also conducted. A large number of biological data and samples were collected during the surveys for whales taken under the commercial whaling within the Japanese exclusive economic zone (EEZ) of the western North Pacific Ocean. Species and figures of bycatch and stranding of large cetaceans are based on the reports of prefecture governments to the FAJ, which compile information from individual fishermen, fishermen cooperatives and general public. Data and samples collected are being analyzed for contributing to the management of large cetaceans in the North Pacific and the Antarctic.

1. SIGHTINGS DATA

	Large Area	Species	Year	Local Area	No. of Sightings
JASS-A Dedicated sighting vessel (including middle and low latitudinal sighting survey) (<i>Yushin-Mar</i> No.2, <i>Yushin-Mar</i> No.3) (2024/2025)	Southern Ocean	Blue whale	2024/2025	Area IVE	26
		Fin whale			74
		Sei whale			3
		Antarctic minke whale			332
		Dwarf minke whale			5
		Humpback whale			1,527
		Southern right whale			3
		Sperm whale			7
		Southern bottlenose whale			22
North Pacific Dedicated Sighting vessel survey in summer (<i>Yushin-Mar</i> , <i>Kaiyo-Mar</i> No.7) (2024)	Pacific Ocean - North	Sperm whale	2024/2025	Western North Pacific	1
		Blue whale			25
		Fin whale			49
		Sei whale			98
		Bryde's whale			76
		Common minke whale			6
		Humpback whale			7
		Sperm whale			243
IWC-POWER Dedicated Sighting vessel (<i>Yushin-Mar</i> No.2) (2024)	Arctic Ocean Pacific Ocean - North	Bowhead whale	2024	Chukchi Sea Bering Sea	2
		Gray whale			78
		Fin whale			156
		Sei whale			14
		Common minke whale			6
		Humpback whale			42
		Sperm whale			6
		Fin whale			53
North Pacific Dedicated Sighting vessel survey in spring (<i>Yushin-Mar</i> , <i>Yushin-Mar</i> No.2) (2024)	Pacific Ocean - North	Bryde's whale	2024	Western North Pacific Sea of Okhotsk Sea of Japan	9
		Common minke whale			41
		Humpback whale			60
		Sperm whale			47
		Fin whale			5
Dedicated Sighting vessel on small cetacean sighting survey (<i>Kaiyo-Mar</i> No.7) (2024)	Pacific Ocean - North	Common minke whale	2024	Sea of Japan	4

2. MARKING DATA

2.1 Natural marking data

	Large Area	Species	Year	Local Area	Feature	No. of whales photo identified
JASS-A Dedicated sighting vessel (<i>Yushin-Mar</i> No.2 , <i>Yushin-Mar</i> No.3) (2024/2025)	Southern Ocean	Blue whale	2024/2025	Area IVE	Head, Dorsal fin, Lateral marking	24
		Dwarf minke whale			Lateral marking	1
		Humpback whale			Fluke	36
		Southern right whale			Head, Fluke	3
IWC-POWER Dedicated Sighting vessel (<i>Yushin-Mar</i> No.2) (2024)	Arctic Ocean Pacific Ocean - North	Bowhead whale	2024	Chukchi Sea Bering Sea	Lateral marking	1
		Gray whale			Lateral marking	5
		Fin whale			Dorsal fin	34
		Humpback whale			Fluke, Dorsal fin	14
North Pacific Dedicated Sighting vessel survey in summer (<i>Yushin-Mar</i> , <i>Kaiyo-Mar</i> No.7) (2024)	Pacific Ocean - North	Blue whale	2024	Western North Pacific	Dorsal fin, Lateral marking	1
		Humpback whale			Fluke	1
North Pacific Dedicated Sighting vessel survey in spring (<i>Yushin-Mar</i> , <i>Yushin-Mar</i> No.2) (2024)	Pacific Ocean - North	Humpback whale	2024	Western North Pacific Sea of Okhotsk Sea of Japan	Head, Dorsal fin, Fluke	5
Coastal Vessel-Based Photo-ID Survey around Hachijo Island (<i>Akamaru</i>)(2025)	Pacific Ocean - North	Humpback whale	2025	Hachijo Island Coastal Area	Fluke	89

2.2 Telemetry data

	Large Area	Species	Year	Local Area	Tag Type	No. of Deployments
JASS-A Dedicated sighting vessel (<i>Yushin-Mar</i> No.2 , <i>Yushin-Mar</i> No.3) (2024/2025)	Southern Ocean	Fin whale	2024/2025	Area IVE	Satellite	11
		Antarctic minke whale			Satellite	25
		Humpback whale			Satellite	2
North Pacific Dedicated Sighting vessel survey in summer (<i>Yushin-Mar</i> , <i>Kaiyo-Mar</i> No.7) (2024)	Pacific Ocean - North	Fin whale	2024	Western North Pacific	Satellite	5
North Pacific Dedicated Sighting vessel survey in spring (<i>Yushin-Mar</i> , <i>Yushin-Mar</i> No.2) (2024)	Pacific Ocean - North	Common minke whale	2024	Western North Pacific Sea of Okhotsk Sea of Japan	Satellite	13

3. Biopsy samples

	Large Area	Species	Year	Local Area	Number Collected
JASS-A Dedicated sighting vessel (<i>Yushin-Mar</i> No.2 , <i>Yushin-Mar</i> No.3) (2024/2025)	Southern Ocean	Blue whale	2024/2025	Area IVE	12
		Fin whale			18
		Antarctic minke whale			35
		Dwarf minke whale			1
		Humpback whale			52
		Southern right whale			3
IWC-POWER Dedicated Sighting vessel (<i>Yushin-Mar</i> No.2) (2024)	Arctic Ocean Pacific Ocean - North	Gray whale	2024	Chukchi Sea Bering Sea	3
		Fin whale			7
		Sei whale			2
		Humpback whale			8
North Pacific Dedicated Sighting vessel survey in summer (<i>Yushin-Mar</i> , <i>Kaiyo-Mar</i> No.7) (2024)	Pacific Ocean - North	Fin whale	2024	Western North Pacific	5
North Pacific Dedicated Sighting vessel survey in spring (<i>Yushin-Mar</i> , <i>Yushin-Mar</i> No.2) (2024)	Pacific Ocean - North	Fin whale	2024	Western North Pacific Sea of Okhotsk Sea of Japan	5
		Common minke whale			10
Dedicated Sighting vessel on small cetacean sighting survey (<i>Kaiyo-Mar</i> No.7) (2024)	Pacific Ocean - North	Fin whale	2024	Sea of Japan	1

4. Direct catches of cetaceans

	Large Area	Species	Year	Local Area	Total Landed	No. of animals examined	No. of research items	Type of Catch
Factory ship type whaling (2024)	Pacific Ocean - North	Sei whale	2024	Western North Pacific	25	25	27	Commercial whaling
		Bryde's whale			175	175	27	
		Fin whale			30	30	27	
Coastal base type whaling (Ayukawa landstation) (2024)	Pacific Ocean - North	Common minke whale	2024	Off Japanese coast	10	10	25	Commercial whaling
Coastal base type whaling (Hachinohe landstation) (2024)	Pacific Ocean - North	Common minke whale	2024	Off Japanese coast	36	36	25	Commercial whaling
Coastal base type whaling (Abashiri landstation) (2024)	Pacific Ocean - North	Common minke whale	2024	Off Japanese coast	16	16	25	Commercial whaling
Coastal base type whaling (Kushiro landstation) (2024)	Pacific Ocean - North	Common minke whale	2024	Off Japanese coast	25	25	25	Commercial whaling
		Bryde's whale			4	4	26	

5. Fisheries bycatches of cetaceans

Species	No. of animals	Location ¹⁾	Fate ²⁾	Gear ³⁾	Target fish species ⁴⁾	Source or contact
Common minke whale	7	Hokkaido	K	FPN	NA	FAJ
	4	Aomori	K	FPN		
	10	Iwate	K	FPN		
	7	Miyagi	K	FPN		
	1	Chiba	K	FPN		
	1	Kanagawa	K	FPN		
	1	Niigata	K	FPN		
	1	Niigata	R	FPN		
	8	Toyama	K	FPN		
	6	Ishikawa	K	FPN		
	1	Fukui	K	FPN		
	1	Shizuoka	K	FPN		
	3	Mie	K	FPN		
	2	Wakayama	K	FPN		
	3	Shimane	K	FPN		
	4	Yamaguchi	K	FPN		
	2	Kochi	K	FPN		
	11	Nagasaki	K	FPN		
	5	Miyazaki	K	FPN		
	2	Kagoshima	K	FPN		
Fin whale	2	Iwate	K	FPN		
	1	Miyagi	D	FPN		
	1	Shimane	D	FPN		
Bryde's whale	1	Iwate	K	FPN		
Humpback whale	1	Chiba	D	FPN		
	1	Wakayama	R	FPN		
	1	Nagasaki	D	FPN		
	5	Okinawa	R	FPN		
Unidentified large whale	1	Kanagawa	R	FPN		
	1	Tottori	R	FPN		

1) Recorded at the place of fishing gears.

2) Fate of whale: D = discarded dead or seriously injured, K = kept for sale or specimen, R = released alive

3) Described using "FAO FISHING DESCRIPTION AND CODES", that is, stationary uncovered pound nets (FPN), set gillnets (GNS) and miscellaneous gear (MIS)

4) Target fish species: NA = not available

6. Stranding of cetaceans

Species	No. strandings	Prefecture	Source or contact
Common minke whale	6	Hokkaido	FAJ
	3	Aomori	
	1	Kanagawa	
	1	Wakayama	
	2	Kagoshima	
Fin whale	1	Hokkaido	
	1	Fukui	
	1	Hyogo	
	1	Tottori	
	1	Shimane	
Humpback whale	1	Hokkaido	
	2	Chiba	
	1	Kochi	
	1	Okinawa	
Sperm whale	3	Hokkaido	
	1	Iwate	
	2	Fukushima	
	1	Ibaraki	
	1	Chiba	
	1	Mie	
	1	Osaka	
	1	Kagoshima	
Unidentified large whale	1	Tottori	

7. Publications

- Best, P.B., Ohsumi, S., Kato, H. and Donovan, G.P. 2024. The SOWER programme in the Antarctic: Background, aims and objectives. *J. Cetacean Res. Manage.* (special issue) 4: 1–11.
- Goto, M., Tamura, T., Bando, T. and Yasunaga, G. 2024. Genetically identified J-stock common minke whales: an overview of their biological and ecological features in waters around Japan. *Cetacean Population Studies*. <https://doi.org/10.34331/cpops.2022-Re-001>
- Igarashi, K., Tanabe, A., Sahara, H., Nozaki, R., Kondo, H., Katsumata, T., Tamura, S., Yamakoshi, T., Mori, M., Miyagi, M., Nakamura, G., Kanda, N. and Murase, H. 2025. Application of DNA Methylation–Based Age Estimation to Construct an Age Structure of Humpback Whales in a Newly Emerged Wintering Ground Around Hachijojima Island, Tokyo Metropolis, Japan. *Ecology and Evolution*. 15: e70854. <https://doi.org/10.1002/ece3.70854>
- Kato, H., Matsuoka, K., Nakamura, G. and Best, P. B.: Sightings of dwarf minke whales in the Southern Hemisphere during the SOWER cruises. *J. Cetacean Res. Manage.* (special issue) 4: 63-68.
- Konishi, K., Minamikawa, M., Kleivane, L. and Takahashi, M. 2024. Annual phenology and migration routes to breeding grounds in western-central North Pacific sei whales. *Scientific Reports*.

14:11212. <https://doi.org/10.1038/s41598-024-61831-8>

- Olson, P.A., Kinzey, D., Double, M.C., Matsuoka, K. and Findlay, K. 2024. Capture–recapture estimates of Antarctic blue whale abundance and population growth rate. *Marine Mammal Science*, e13215. <https://doi.org/10.1111/mms.132150>
- Pastene, L.A. 2024. A review of biopsy sampling experiments and studies of stock structure, phylogeny and taxonomy of large whales based on samples obtained on SOWER cruises. *J. Cetacean Res. Manage.* (special issue) 4: 43–62.
- Sekine, A., Yasunaga, G., Kumamoto, S., Fujibayashi, S., Munirah, I., Bai, L., Tani, T., Sugano, E., Tomita, H., Ozaki, T., Kiyono, T., Inoue-Murayama, M. and Fukuda, T. 2024. Characterization of common minke whale (*Balaenoptera acutorostrata*) cell lines immortalized with the expression of cell cycle regulators. *Advanced Biology* 8(3): e2300227. doi:10.1002/adbi.202300227.
- Shabangu, F.W., Stafford, K.M., Findlay, K.P., Rankin, S., Ljungblad, D., Tsuda, Y., Morse, L., Clark, C.W., Kato, H., Ensor, P. 2024. Overview of the SOWER cruise circumpolar acoustic survey data and analyses of Antarctic blue whale calls. A special issue focusing on the analysis of data gathered during the IWC SOWER cruises which ran from 1978/79 to 2008/09. *J. Cetacean Res. Manage.* (special issue) 4: 21-41.
- Takahashi, M., Førlund, B., Pastene, L.A. and Skaug, H.J. 2024. Geographical distribution of close kin in southern right whales on feeding grounds. *PLoS ONE* 19(4): e0301588. <https://doi.org/10.1371/journal.pone.0301588>
- Ten, S., Poli, F.F., Konishi, K., Pastene, L.A., Martín, V., Raga, J.A. and Aznar, F.J. 2025. The epibiont *Xenobalanus globicipitis* indicates differences in swimming kinematics among cetaceans. *Mar Biol.* 172: 7. <https://doi.org/10.1007/s00227-024-04555-7>
- Yanai, R., Yasunaga, G., Tsuji, S., Honda, T., Iwata, A., Miyagawa, E., Yoshida, K., Kishimoto, M., Sakai, H., Fujise, Y., Asagiri, M. and Mitamura, Y. 2025. Dietary intake of whale oil–containing ω -3 long-chain polyunsaturated fatty acids attenuates choroidal neovascularization in mice. *The FASEB Journal*. 39: e70378. doi:10.1096/fj.202402041R