

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

Fisheries Resources Institute  
Japan Fisheries Research and Education Agency

This report summarizes statistical data on small cetacean fisheries in 2024 (calendar year) as well as research conducted during the fiscal year 2024 (April 2024 to March 2025) by the Fisheries Resources Institute (hereafter FRI) of the Japan Fisheries Research and Education Agency and the Fisheries Agency of the Ministry of Agriculture, Forestry and Fisheries, the Government of Japan (hereafter FAJ) with the cooperation of other organizations concerned.

## 1. SPECIES STUDIED

Common name	Scientific name	Area/stock(s)
Dall's porpoise	<i>Phocoenoides dalli</i>	Off Pacific coast, Okhotsk Sea and Japan Sea
Finless porpoise	<i>Neophocaena asiaeorientalis</i>	Coastal waters of Japan
Pacific white-sided dolphin	<i>Lagenorhynchus obliquidens</i>	Off Pacific coast, and Japan Sea
Striped dolphin	<i>Stenella coeruleoalba</i>	Off Pacific coast
Pantropical spotted dolphin	<i>Stenella attenuate</i>	Off Pacific coast
Bottlenose dolphin	<i>Tursiops truncatus</i>	Off Pacific coast and East China Sea
Rough-toothed dolphin	<i>Steno bredanensis</i>	Off Pacific coast
Melon-headed whale	<i>Peponocephala electra</i>	Off Pacific coast
Risso's dolphin	<i>Grampus griseus</i>	Off Pacific coast and Japan Sea
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	Off Pacific coast and East China Sea
False killer whale	<i>Pseudorca crassidens</i>	Off Pacific coast
Killer whale	<i>Orcinus orca</i>	Off Pacific coast
Baird's beaked whale	<i>Berardius bairdii</i>	Off Pacific coast, Okhotsk Sea and Okhotsk Sea
Other species	-	Around Japan, others

## 2. SIGHTINGS DATA

### 2.1 Field work

#### 2.1.1 Systematic sighting survey

The FRI and FAJ conducted a dedicated shipboard sighting survey in the Sea of Japan using a research vessel with a top barrel. During the survey, the following small cetaceans were sighted.

Table 1. Small cetaceans sighted in the dedicated shipboard survey conducted during the fiscal year 2024 (April 2024 to March 2025).

Species	Date	Area	No. of sightings	Contact institute
Baird's beaked whale	31/05/24	Sea of Japan	25	FRI

Pacific white-sided dolphin	- 23/07/24		11
Killer whale			4
Dall's porpoise*			16
Cuvier's beaked whale			1

"No. of sightings" indicates the numbers of schools sighted. These sightings were made during the sighting survey for Baird's beaked whale conducted in the Sea of Japan (from 31 May to 23 July 2024) using the research vessel Kaiyo-maru No.7. \* Dall's porpoise includes "unknown type" Dall's porpoise.

### 2.1.2 Opportunistic, platforms of opportunity

Opportunistic sighting data have been collected during coastal base type whaling (renamed from "small-type whaling" due to the amendment 2.1.1 of the Fishery Act on December 1st, 2020, hereafter coastal base type whaling) and dolphin fishery operations. The data mainly consist of sightings of target species at the fishing grounds (e.g. the Baird's beaked whale, the short-finned pilot whale, and the Risso's, bottlenose, striped, spotted and melon-headed whale).

## 2.2 Analyses/development of techniques

Kanaji and Sasaki have estimated the partial abundances of false killer whales, striped dolphins, and Pacific white-sided dolphins off the coast of Japan using the data from shipboard sighting survey in 1985-2021. These results were published in Kanaji and Sasaki (2024). Kanaji, Maeda, and Sasaki have estimated the abundances of northern form of short-finned pilot whales using the data from shipboard sighting survey in 2021-2022. They also estimated population dynamics using abundance and catch time-series data and published these results in Kanaji et al. (2025).

## 3. MARKING DATA

### 3.1 Field work

#### 3.1.1 Natural marking data

Photo-identification for bottlenose dolphins driven in Taiji-based fishing boats was conducted. These photos were matched with those taken during the dedicated sighting surveys.

#### 3.1.2 Artificial marking data

With the cooperation of the Taiji Whale Museum, and the Mie University, FRI attached plastic tags to the dorsal fins of 5 common bottlenose dolphins caught by the Taiji dolphin drive fishery.

#### 3.1.3 Telemetry data

During the sighting survey for Baird's beaked whale in the Sea of Japan, a Pop-up archival tag (MiniPAT, Wildlife Computers) and a satellite tag (SPOT tag, Wildlife Computers) were attached to the body of Pacific white sided dolphin and Baird's beaked whale, respectively. Under the joint project among FRI, the Taiji Whale Museum and the Mie University, a satellite tag (SPOT tag, Wildlife Computers) was attached to the dorsal fin of seven bottlenose dolphins between September and December 2024. After released to the sea, their movements were tracked for periods ranging from 6 to 104 days.

### 3.2 Analyses/development of techniques

With the cooperation of Tokyo University of Agriculture, Kanaji and Sasaki analysed satellite tracking data from eight Dall's porpoises released in 2018 and 2019, and published these results in Kanaji et al. (2024).

#### 4. TISSUE/BIOLOGICAL SAMPLES COLLECTED

##### 4.1 Biopsy samples

The FRI collected each one biopsy samples from eight pacific white-sided dolphins and four Baird's beaked whales during the sighting survey for Baird's beaked whale in the Sea of Japan in the fiscal year 2024 (April 2024 to March 2025).

##### 4.2 Samples from directed catches or bycatches

The national quota of Baird's beaked whales for the mentioned period was 58 animals for the coastal base type whaling. Whaling operation was conducted from 14 June to 22 June and from 26 July to 7 August at the Sea of Japan, from 4 July to 8 August at the land station in Wadoura on the Pacific coast, and from 6 June to 19 July and from 26 October to 11 November at the land station in Ayukawa on the Pacific coast. The operation at the Okhotsk coast was not conducted. A total of 39 Baird's beaked whales (7 off the Sea of Japan coast, 32 off the Pacific coast) were taken by four catcher boats (*Kohei-maru* #8, *Taisho-maru* #3, *Katsu-maru* #7, and *Sumitomo-maru* #51). All the animals were targeted for biological samplings, which were conducted by two researchers.

The national quota of northern form of short-finned pilot whales (*Tappanaga*) for small-type whaling was 36 animals. During the operation for common minke whales off Sanriku coast, catcher boats encountered northern form of short-finned pilot whales, but no whales were caught because fishermen prioritized operation for common minke whales. The national quota of 33 southern form of short-finned pilot whales (*Magondo*) was set for the coastal base type whaling at the Taiji and Wadoura land stations. No pilot whales were encountered during the operation at the Wadoura land station. The operation at the Taiji station was not conducted. No false killer whales (20 animals of annual quotas) or southern form of short-finned pilot whales were caught.

The surveys for animals caught by the drive fishery at Taiji were conducted to collect data and samples for life history and genetic studies, by 7 researchers during the periods from 1 September to 30 September 2024, from 15 November to 25 December 2024, and from 5 January to 28 February 2025. They examined 35 southern form of short-finned pilot whales, 41 melon-headed whales, and 185 striped dolphins, 1 pantropical spotted dolphins, 1 rough-toothed dolphins, 37 Risso's dolphins and 15 bottlenose dolphins.

Of the individuals surveyed, the samples obtained from the coastal base type whaling and the drive fishery at Taiji during the period of April 2024 to March 2025 are shown in Table 4.

Okinawa Prefectural Government requested fishermen to collect teeth and skin samples as a part of supervision of the fishery, from small cetaceans caught by hand harpoon fishery (crossbow fishery) in Okinawa in 2024 season. These samples will be sent to FRI for age determination and genetic examinations.

Table 4. Samples collected from small cetaceans caught by the small-type whaling and driven fishery during the fiscal year 2023 (April 2023 to March 2024).

Species	Area	Tissue type(s)	No. Collected	Archived (Y/N)	Contact Institute
Baird's beaked whale	Western North Pacific	To, Ma, O, U, Te, E, Sk and C	39	Y	FRI
Southern form of short-finned pilot whale	Western North Pacific	To, Ma, O, U, Te, C, and Sk	35	Y	
Bottlenose dolphin	Western North Pacific	To, Ma, O, U, Te, C, and Sk	15	Y	
Risso's dolphin	Western North Pacific	To, Ma, O, U, Te, C, and Sk	37	Y	
Striped dolphin	Western North Pacific	To, Ma, O, U, Te, C, and Sk	185	Y	
Melon-headed whale	Western North Pacific	To, Ma, O, U, Te, C, and Sk	41	Y	
Pantropical spotted dolphin	Western North Pacific	To, Ma, O, U, Te, C, and Sk	1	Y	

Rough-toothed dolphin	Western North Pacific	To, Ma, O, U, Te, C, and Sk	1	Y	
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E: epididymis, Ma: mammary gland, O: ovaries, Sk: skin, Te: testis, To: tooth, U: uterine horn, C: crystalline lens.

#### 4.3 Samples from stranded animals

Sample collection from stranded small cetaceans by the FRI was not conducted during the fiscal year 2023 (April 2024 to March 2025).

#### 4.4 Analyses/development of techniques

Maeda determined ages of a total of 305 animals (southern form of short-finned pilot and melon-headed whales, and bottlenose, Risso's and striped dolphins) taken by the drive fishery at Taiji. Maeda also examined ovaries of 118 animals (southern form of short-finned pilot and melon-headed whales and bottlenose, Risso's and striped dolphins) caught by the drive fishery and investigated histological samples of testis, mammary gland, and uterine horn of a total of 232 animals (Melon-headed whales and bottlenose and Risso's dolphins) taken by drive fishery at Taiji, for studies on sexual maturity.

Maeda conducted analysis of the life history for small cetaceans around Japan using age and maturity information.

### 5. STATISTICS FOR SMALL CETACEANS

#### 5.1 For the calendar year 2024

Target species, fishing season, quota, catcher boats and actual catches for the coastal base type whaling are provided in section 4.2.

Regarding the dolphin fisheries, management season has been set from 1 August to 31 July of the following year for Dall's porpoise fisheries, and from 1 October to 30 September of the following year for other species, since 1996. The management season for fisheries in Wakayama Prefecture has been set from 1 September to 31 August of the following year. The statistics on dolphin fisheries covers catches of the calendar year (1 January to 31 December), while FAJ manages dolphin fisheries by their own fishing season aforementioned. Thus, in some cases, catches aggregated by calendar year may exceed the seasonal (fishing yearly) catch in appearance, but the actual seasonal catch is below the allocated catch quota. Direct small cetacean catches are given in Table 5 in this section by prefecture and by type of fisheries. The data have been collected by the International Affairs Division of the FAJ based on reports from the prefectural governments.

Catch quota for dolphin fisheries for the 2024/2025 season was 4,137 animals for *dalli*-type Dall's porpoises, 4,398 for *truei*-type Dall's porpoises, 398 for Risso's dolphins, 320 for bottlenose dolphins, 329 for pantropical spotted dolphins, 521 for striped dolphins, 127 for southern form of short-finned pilot whales, 63 for false killer whales, 234 for Pacific white-sided dolphins, 30 for rough-toothed dolphins, and 363 for melon-headed whales.

Corresponding operational months by prefecture in 2024 were as follows: hand harpoon fishery was permitted for nine months (1 January to 31 August and 1-31 December) in Okinawa prefecture, for eight months (1 January to 31 August) in Wakayama, for six months (1 January to 30 April and 1 November to 31 December) in Aomori, Miyagi, Iwate, and Chiba, and for 4.5 months (1 May to 15 June and 1 August to 31 October) in Hokkaido. Drive fishery was permitted for nine months in Wakayama (1 January to 31 May and 1 September to 31 December) and for seven months in Shizuoka (1 January to 31 March and 1 September to 31 December).

Table 5. Direct catch of small cetacean in 2022.

Species	Type of fishery	Prefecture <sup>1)</sup>	Total landed <sup>2)</sup>
Baird's beaked whale	Coastal base type whaling	Aomori	7
		Miyagi	22
		Chiba	10
<i>Dalli</i> -type of Dall' porpoise	Hand harpoon	Iwate	341

<i>Dalli-type</i> of Dall' porpoise	Hand harpoon	Miyagi	2
Southern form of short-finned pilot whale ( <i>Magondo</i> )	Drive	Wakayama	37
Striped dolphin	Drive	Wakayama	189
Bottlenose dolphin	Drive	Wakayama	122
Risso's dolphin	Drive	Wakayama	73
Pantropical spotted dolphin	Drive	Wakayama	57
Rough-toothed dolphin	Drive	Wakayama	20
Melon-headed whale	Drive	Wakayama	41
Southern form of short-finned pilot whale ( <i>Magondo</i> )	Hand harpoon	Okinawa	2
Bottlenose dolphin	Hand harpoon	Okinawa	2
False killer whale	Hand harpoon	Okinawa	2

1) Catches by the coastal base type whaling and the drive fishery were recorded at the place of landing of products. Catches by the hand harpoon fishery were recorded at the place of registration of vessels.

2) Statistics of the coastal base type whaling are based on reports of researchers and gunners. Those of other fisheries are based on reports of prefectural governments to the Fisheries Agency. They are a compilation of landing slips (hand harpoon fisheries in Iwate and Hokkaido) or reports from individual fishermen or fishermen cooperatives (other prefectures).

## 5.2 Non-natural mortality for the calendar year 2024

### 5.2.1 Observed or reported ship strikes

We do not have data collecting system for ship strike incidence of small cetaceans.

### 5.2.2 Fishery bycatch

Provisional figures for incidental mortality of small cetaceans (bycatch) by Japanese fisheries, by Prefecture in January-December 2023, are shown in Table 6. Species and figures are based on the reports of prefecture governments to the FAJ, which are reports from individual fishermen or fishermen cooperatives.

Table 6. Fishery bycatch of small cetaceans in 2024.

Species	No. of animals	Location <sup>1)</sup>	Gear <sup>3)</sup>	Target fish species <sup>4)</sup>	Source or contact
<i>Dalli-type</i> of Dall' porpoise	1	Hokkaido	FPN	NA	FAJ
Finless porpoise	1	Chiba	FPN		
	3	Osaka	MIS		
	1		GNS		
	1	Nagasaki	GNS		
	2	Oita	GNS		

- 1) Recorded at the place of fishing gears.
- 2) Described using “FAO FISHING DESCRIPTION AND CODES”, that is, stationary uncovered pound nets (FPN), set gillnets (GNS) and miscellaneous gear (MIS).

### 5.3 Strandings of small cetaceans

Provisional figures for strandings of small cetaceans in Japan, for the period January-December 2023, are shown in Table 7. Species and figures are based on reports of prefecture governments to the FAJ, which compile information from individual fishermen, fishermen cooperatives or the general public. Number of postmortems in Table 7 indicate the numbers of dead animals when they stranded.

Table 7. Strandings of small cetaceans in 2023.

Species	No. strandings	Contact person(s)/ Institute(s)
Pygmy sperm whales	3	FAJ
Dwarf sperm whales	2	
Baird’s beaked whale	1	
Cuvier's beaked Whale	4	
Stejneger's Beaked Whale	1	
False killer whale	1	
Short-beaked common dolphin	2	
Bottlenose dolphin	2	
Risso’s dolphin	9	
Striped dolphin	15	
Northern right whale dolphin	1	
Long-beaked common dolphin	1	
Pacific white-sided dolphin	24	
Rough-toothed dolphin	2	
Melon-headed whale	1	
Harbor porpoise	5	
<i>Dalli</i> -type of Dall’s porpoise	9	
Finless porpoise	114	

In addition, the Institute of Cetacean Research (4-5 Toyomi, Chuo-ku, Tokyo 104-0055, Japan), and the National Science Museum (4-1-1, Amakubo, tsukuba, Ibaragi 305-0005, Japan) voluntarily collected relevant information on strandings.

### 5.4 Earlier years’ statistics

There are no changes in earlier years’ statistics.

## 6. OTHER STUDIES AND ANALYSES

No other study nor analysis on small cetaceans was conducted.

## 7. LITERATURE CITED

None.

## 8. PUBLICATION ON SMALL CETACEANS

### 8.1 Published or In Press' papers only

- Tashiro K, Segawa T, Suzuki M, Kanaji Y, Maeda H, Itou T. 2024. Cultivation of primary cells derived from three organs of a striped dolphin (*Stenella coeruleoalba*) using a simple culture method. *In Vitro Cell Dev Biol Anim.* 60(9):961-964.
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- Kanaji, Y., Maeda, H., Sasaki, H. (2025) Recovering or still depleted? Updated population assessment of *Tappanaga*, a northern local population of short-finned pilot whales (*Globicephala macrorhynchus*) off the coast of Japan. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 35, e70051 .
- Kanaji, Y., Sasaki, H. (2024) Partial abundances of three fishery-targeted species of Delphinidae cetaceans (false killer whale, striped dolphin, and Pacific white-sided dolphin) off the Pacific coast of Japan, estimated by the conventional line-transect approach. *Fisheries Science*, 90, 871–880.
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- Maeda, H. 2025. Baird's beaked whale, *Berardius bairdii*, Sea of Japan, Sea of Okhotsk and Pacific Ocean. The Current status of international fishery stocks. Fisheries Agency and Fisheries Research Agency. [https://kokushi.fra.go.jp/R06/R06\\_50\\_BEW.pdf](https://kokushi.fra.go.jp/R06/R06_50_BEW.pdf). 7pp. (in Japanese)
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- Minamikawa, S. 2025. Narrow-ridged finless porpoise. The Current status of international fishery stocks. Fisheries Agency and Japan Fisheries Research and Education Agency. [https://kokushi.fra.go.jp/R06/R06\\_56\\_PFI.pdf](https://kokushi.fra.go.jp/R06/R06_56_PFI.pdf) . 6pp. (in Japanese)

### 8.2 Unpublished literature

- Kanaji, Y., Sasaki, H. 2024. Line-transect sampling based abundance estimation for false killer whales, striped dolphins, and Pacific white-sided dolphins in the coastal waters off Japan. Abstract book of 2024 fall meeting of Japanese society of Fisheries Science. P. 111.
- Maeda, H. and Kanaji, Y. 2024. Estimating species- and population-specific life history parameters of two small cetacean species, particularly important for population dynamics modeling PICES-2024 Annual Meeting. Book of abstract. p. 384.