Japan. Progress report on small cetacean research, April 2014 to March 2015, with statistical data for the *calendar year* 2014

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This report summarizes small cetacean fisheries in the 2014 calendar year as well as researches conducted during the 2014 fiscal year (from April 2014 to March 2015) by the National Research Institute of Far Seas Fisheries (hereafter NRIFSF) of the Fisheries Research Agency of Japan (hereafter FRA) and the Fisheries Agency of the Ministry of Agriculture, Forestry and Fisheries, the Government of Japan (hereafter FAJ) with the cooperation of other related organizations. This report covers information on small cetaceans which is not included in the "National Progress report", https://portal.iwc.int/progressreportspublic (submitted to the 66a IWC/SC meeting). The Government of Japan considers management of small cetaceans is outside the competence of the International Convention for the Regulation of Whaling.

1. SPECIES AND STOCKS STUDIED

Common name	Scientific name	Area/stock(s)	Items referred to
Dall's porpoise	*Phocoenoides dalli*	Off Pacific coast, and Sea of Japan	2.1.1, 2.2, 5.1, 5.2, 5.3, 8.1
Finless porpoise	*Neophocaena phocaenoides*	Coastal waters of Japan	2.1.1, 2.2, 5.2.2, 5.3, 8.1, 8.2
Pacific white-sided dolphin	*Lagenorhynchus obliquidens*	Off Pacific coast, and Sea of Japan	2.1.1, 2.1.2, 3.1.3, 4.1, 4.2, 5.1, 5.2.2, 5.3, 8.2
Striped dolphin	*Stenella coeruleoalba*	Western North Pacific	2.1.1, 4.1, 4.2, 5.1, 5.2, 5.3
Pantropical spotted dolphin	*Stenella attenuata*	Off Pacific coast	2.1.1, 4.1, 4.2, 5.1
Bottlenose dolphin	*Tursiops truncatus*	Off Pacific coast, and East China Sea	2.1.1, 3.1.2, 3.1.3, 4.1, 4.2, 5.1, 5.2, 5.3
Risso's dolphin	*Grampus griseus*	Western North Pacific	2.1.1, 4.2, 5.1, 5.3
Short-finned pilot whale	*Globicephala macrorhynchus*	Western North Pacific, and East China Sea	2.1.1, 4.2, 4.4, 5.1, 5.3
False killer whale	*Pseudorca crassidens*	Off Pacific coast and East China Sea	2.1.1, 4.1, 4.2, 5.1
Killer whale	*Orcinus orca*	Coastal waters of Japan	2.1.1, 2.1.2, 8.1
Baird's beaked whale	*Berardius bairdii*	Off Pacific coast, Sea of Japan and Okhotsk Sea	2.1.1, 2.1.2, 4.2, 4.4, 5.1, 5.3, 8.1
Additional species	-	Around Japan	2.1.1, 4.1, 5.2, 5.3

2. SIGHTINGS DATA

2.1 Field work

2.1.1 Systematic

The NRIFSF and FAJ conducted a total of five dedicated shipboard sighting surveys using research vessels in the North Pacific. All of the vessels are equipped with a top barrel. During these cruises, the following provisional numbers of sightings of small cetaceans were observed. The sightings of large cetaceans were listed in SC/66a/National Progress report submitted to the 66a IWC/SC meeting.

Table 1. Sightings of small cetaceans by dedicated shipboard surveys during the 2014 fiscal year (from April 2014 to March 2015).

Species	Date	Area	No. of sightings	Contact institute
dalli-type Dall's porpoise	12/08/14-31/08/14	Okhotsk Sea	29	NRIFSF
	12/08/14-15/08/14		2	
	1/09/14-12/09/14	Sea of Japan	1	
	1/09/14-8/09/14	western North Pacific	19	
truei-type Dall's porpoise	12/08/14-31/08/14	Okhotsk Sea	6	
	5/06/14-10/07/14	western North Pacific	16	
	1/09/14-8/09/14		8	
Harbor porpoise	1/09/14-8/09/14	western North Pacific	1	
Pacific white-sided dolphin	12/08/14-31/08/14	Okhotsk Sea	48	
	5/06/14-10/07/14	western North Pacific	49	
	1/09/14-8/09/14		19	
Striped dolphin	5/06/14-10/07/14	western North Pacific	1	
	6/06/14-9/07/14		12	
Pantropical spotted dolphin	14/05/14-2/06/14	western North Pacific	2	
	5/06/14-10/07/14		6	
	6/06/14-9/07/14		15	
Short-beaked common dolphin	6/06/14-9/07/14	western North Pacific	2	
Rough-toothed dolphin	5/06/14-10/07/14	western North Pacific	3	
	6/06/14-9/07/14		1	
Fraser's dolphin	6/06/14-9/07/14	western North Pacific	4	
Bottlenose dolphin	14/05/14-2/06/14	western North Pacific	9	
	5/06/14-10/07/14		6	
Killer whale	12/08/14-31/08/14	Okhotsk Sea	1	
	12/08/14-15/08/14		2	
Northern form short-finned pilot whale	5/06/14-10/07/14	western North Pacific	1	
	1/09/14-8/09/14		1	
	13/09/14-16/09/14		4	
Southern form short-finned pilot whale	14/05/14-2/06/14	western North Pacific	4	
	5/06/14-10/07/14		3	
	6/06/14-9/07/14		7	
False killer whale	5/06/14-10/07/14	western North Pacific	1	
	6/06/14-9/07/14		3	
Risso's dolphin	14/05/14-2/06/14	western North Pacific	21	
	5/06/14-10/07/14		73	
	6/06/14-9/07/14		6	
	1/09/14-8/09/14		6	

Table 1. continued

Table 1. continued.

Species	Date	Area	No. of sightings	Contact institute
Melon-headed whale	14/05/14-2/06/14	western North Pacific	4	NRIFSF
	5/06/14-10/07/14		2	
	6/06/14-9/07/14		9	
Pygmy killer whale	14/05/14-2/06/14	western North Pacific	1	
Baird's beaked whale	12/08/14-31/08/14	Okhotsk Sea	4	
	1/09/14-12/09/14	Sea of Japan	16	
	5/06/14-10/07/14	western North Pacific	26	
	1/09/14-8/09/14		1	
Cuvier's beaked whale	5/06/14-10/07/14	western North Pacific	1	
Stejneger's beaked whale	5/06/14-10/07/14	western North Pacific	2	
True's beaked whale	6/06/14-9/07/14	western North Pacific	1	
Pygmy sperm whale	14/05/14-2/06/14	western North Pacific	3	
	5/06/14-10/07/14		1	

No. of sightings indicates number of schools sighted. All sightings were made by the following five shipboard surveys.

1) Small cetacean sighting survey in the south of Honsyu district, using the research vessel *Shunyo-maru*. Research period was from 14 May to 2 June 2014.

2) Sighting survey for dolphins 1, using the research vessel *Kaiyo-maru No.8*. Research period was from 5 June to 10 July 2014.

3) Sighting survey for dolphins 2, using the research vessel *Shonan-maru No.2*. Research period was from 6 June to 9 July 2014.

4) Sighting survey for Dall's porpoise in the Okhotsk Sea, using the research vessel *Shunyo-maru*. Research period was from 7 August to 16 September 2014

5) Sighting survey for common minke whale in the Okhotsk Sea, using the research vessel *Shonan-maru No.2*. Research period was from 8 August to 8 September 2014.

In cooperation with the Whale Watching Association in Tosa Bay (WATB), the NRIFSF conducted a sighting survey for Bryde's whales in the coastal waters off Kochi in July 2014, using a total of six whale watching boats belong to the WATB. The boats (5 -10t) were without top barrels and excluded from the above table, but employed as sighting survey vessels in local coastal waters. The survey lasted three days in July, and Toshiya Kishiro (NRIFSF), five research assistants and six fishermen members of WATB acted as the researchers on board. Besides Bryde's whale sightings, a total of four schools (530 animals) of long-beaked common dolphins were sighted.

Two aerial sighting surveys were conducted to obtain information on distribution and abundance of cetaceans inhabiting Japanese coastal waters. Waters around Kushiro was surveyed on 23 and 26 September 2014. Tomio Miyashita (NRIFSF), T. Kishiro, and Hiroto Murase (NRIFSF) searched the sea surface for cetaceans, from a small plane (twin engines, babble window) flying at 135 knots and 700 feet in altitude. They searched 943 nautical miles and encountered 6 schools (15 individuals) of Dall's porpoises and two schools (15 animals) of unidentified dolphins (probably Pacific white-sided dolphins). Aerial sighting survey for finless porpoises was conducted in Ise Bay and Mikawa Bay of central part of Japan on 16 and 17 July 2014, from a small plane (single engine, high-wing). Hideyoshi Yoshida (NRIFSF), Masami Furuta (Toba Aquarium), and Natsuko Ogawa (Tokyo University of Marine Science and Technology, hereafter TUMST) searched the sea surface for porpoises, from the plane flying at 80 knots and 500 feet in altitude. They surveyed 330.0 nautical miles and encountered the 117 schools (203 animals) of finless porpoises. Other species were not sighted.

2.1.2 Opportunistic, platforms of opportunity

Opportunistic sighting data have been collected during small-type whaling and dolphin fishery operations. They mainly consist of sightings of target species within the fishing grounds (e.g. Baird's beaked whales, southern form short-finned pilot and false killer whales, Risso's, bottlenose, striped, spotted and pacific white-sided dolphins).

During the JARPN II coastal component off Kushiro, northeast Japan conducted in September 2014, sightings of 2 schools (4 animals) of Baird's beaked whales and of 16 schools (80 animals) of killer whales were obtained by the small-type whaling vessels.

2.2 Analyses/development of techniques

Yu Kanaji (NRIFSF) forwarded analyses on spatial distribution of small odontocetes using long-term sighting data. Kanaji, Miyashita, Yoshida, and Kishiro estimated the abundance of *dalli*- and *truei*-types of Dall's porpoise in the western central part of the Sea of Okhotsk using recent and previous sighting survey data.

Yoshida (NRIFSF) and Ogawa (TUMST) conducted abundance estimation of finless porpoises in Ise Bay and Mikawa Bay, using sighting data from 2014 aerial sighting survey.

3. MARKING DATA

3.1 Field work

3.1.1 Natural marking data

Natural marking was not applied.

3.1.2 Artificial marking data

Under the cooperation with the NRIFSF and the Taiji Whale Museum, 21 bottlenose dolphins and 6 southern form short-finned pilot whales taken by the Taiji dolphin drive fishery on 28 September 2014 to 19 February 2015were released to the wild ocean with the small plastic tags attached on their dorsal fin.

3.1.3 Telemetry data

Shingo Minamikawa (NRIFSF) deployed pop-up archival transmitting (PAT) tags (miniPAT, Wildlife Computers) on two free-swimming Pacific white-sided dolphins in the western North Pacific (coastal area of Japan) in June. The lengths of tagging period were 6 to 13 days, respectively. One tag was retrieved to obtain fine-scaled time-series data of depth, temperature and light level. Two fishing companies attached ARGOS Platform Transmitting Tag (AM-S281A, Wildlife Computers) to the dorsal fins of three Pacific white-sided dolphins and a bottlenose dolphin which were captured in set nets as bycatch during the period from April 2014 to March 2015 at the request of Minamikawa.

Table 2.1. PAT data of small cetaceans collected during the 2014 fiscal year (from April 2014 to March 2015).

Species	Tag type	No. deployed	No. popped up	No. retrieved	Contact institute
Pacific white-sided dolphin	miniPAT	2	2	1	NRIFSF

Table 2.2. Telemetry data of small cetaceans collected during the 2014 fiscal year (from April 2014 to March 2015).

Species	Tag type	No. deployed	Maximum time transmitting	Contact institute;
Pacific white-sided dolphin	Satellite (AM-S281A)	3	138 days	NRIFSF
Bottlenose dolphin	Satellite (AM-S281A)	1	1	NRIFSF

3.2 Analyses/development of techniques

In order to comprehend the migration route of Pacific white-sided dolphins distributing around Japan, Minamikawa compared the tracking data of 28 dolphins obtained by PAT tags and those of 3 dolphins obtained by ARGOS PTTs with water temperature distribution at 10m depth.

4. TISSUE/BIOLOGICAL SAMPLES COLLECTED

4.1 Biopsy samples

During shipboard surveys mentioned in 2.1.1, all the 37 biopsy samples were collected from small cetaceans as show in Table 3.

Table 3. Biopsy samples of small cetaceans collected during the 2014 fiscal year (from April 2014 to March 2015).

Species	Area/stock	no. collected	Archived(Y/N)	No. analyzed	Total holdings	Contact institute
Striped dolphin	Western North Pacific	13	Y	0	13	NRIFSF
Spotted dolphin	East China Sea	2	Y	2	2	NRIFSF
	W North Pacific	10	Y	0	10	NRIFSF
Bottlenose dolphin	W North Pacific	3	Y	3	3	NRIFSF
Common dolphin	W North Pacific	2	Y	0	2	NRIFSF
Pacific White-sided dolphin	W North pacific	2	Y	0	2	NRIFSF
Fraser's dolphin	W North Pacific	1	Y	1	1	NRIFSF
Melon-headed whale	W North Pacific	1	Y	0	1	NRIFSF
False killer whale	W North Pacific	1	Y	0	1	NRIFSF
Unidentified dolphin	W North Pacific	2	Y	0	2	NRIFSF

4.2 Samples from directed catches or bycatches

Samples of small cetaceans from direct catches collected during the period from April 2014 to March 2015 are shown in Table 4.

The national quota of Baird's beaked whales for the mentioned period was 70 animals for small-type whaling (includes 4 animals carryover from the last year's quota). Fishing season was from 25 May to 26 June for land station in Hakodate on the Sea of Japan coast, 20 June to 20 August for land station in Wadaura on the Pacific coast, 20 June to 26 August for land station in Ayukawa on the Pacific coast, 7 July to 14 August, and 4 to 5 October for land station in Abashiri on the Okhotsk coast. A total of 70 whales (ten off Hakodate, four off Abashiri, 56 off the Pacific coast) were taken by five catcher boats (*Seiwa-maru*, *Kohei-maru #8*, *Taisho-maru #28, Katsu-maru #7* and *Sumitomo-maru #51*). All the catches were examined and biological samples were taken by five researchers.

The national quota of northern form short-finned pilot whales for small-type whaling was 36 animals. Fishing season was set for two boats (*Kohei-maru #8* and *Taisho-maru* #28) in the same periods of the operations for Baird's beaked whales, but no whales were taken.

The national quota of southern form short-finned pilot whales for small-type whaling was 36 animals with a fishing season from 1 May to 22 August. During the periods, 2 animals were taken by one catcher boat (*Seiwa-maru*) at Taiji land station, and one animal was taken by other boat (*Sumitomo-maru #51*) at Wadaura land station. In addition, a national quota of twenty false killer whales for small-type whaling in Taiji in the same

periods of the operations for southern from short-finned pilot whales was set, and three animals were taken by *Seiwa-maru*. All the catches were examined and biological samples were taken by the researchers.

Under contract with FRA and supervised by NRIFSF, the Tokai University collected stomach contents of two southern form short-finned pilot, three false killer whales, six Risso's, 11 bottlenose, and 11 striped dolphins taken by hand harpoon fisheries and small-type whaling off Taiji, for feeding habit studies.

The surveys for catches of drive fisheries in Taiji to collect data and samples for life history and genetic studies were conducted by seven researchers during the periods from 11 November to 24 December 2014, and 6 to 30 January 2015. They examined a total of 25 southern form short-finned pilot whales, 345 striped, 19 bottlenose, 96 Risso's, 53 Pantropical spotted, and one Pacific white-sided dolphins.

Okinawa Prefectural Government collected teeth and skin samples as a part of supervision of the fishery, for southern form short-finned pilot whales, and bottlenose dolphins which were taken by hand harpoon fishery (crossbow fishery) in Okinawa in the 2014 fiscal year (from April 2014 to March 2015). Those samples will be sent to NRIFSF for age determination and genetic examinations.

Sample collection of small cetaceans from bycatches by the NRIFSF was not conducted during the period from April 2014 to March 2015.

Table 4. Samples of small cetaceans from direct catches collected during the 2014 fiscal year (from April 2014 to March 2015).

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, V, Sk, and St	56	Y	NRIFSF
	Okhotsk Sea	To, Ma, O, U, Te, E, V, and Sk	4	Y	
	Sea of Japan	To, Ma, O, U, Te, E, V, and Sk	10	Y	
Southern form short-finned pilot whale	Western North Pacific	To, Ma, O, U, Te, E, V, Sk, and St	28	Y	
False killer whale	Western North Pacific	To, Ma, O, U, Te, E, V, Sk, and St	3	Y	
Risso's dolphin	Western North Pacific	To, Ma, O, U, Te, sk, and St	96	Y	
Bottlenose dolphin	Western North Pacific	To, Ma, O, U, Te, sk, and St	19	Y	
Striped dolphin	Western North Pacific	To, Ma, O, U, Te, sk, and St	345	Y	
Pantropical spotted dolphin	Western North Pacific	To, Ma, O, U, Te, and Sk	53	Y	
Pacific white-sided dolphin	Western North Pacific	To, O, and Sk	1	Y	

E: epidydymis, Ma: mammary gland, O: ovaries, Sk: skin, St: stomach content, Te: testis, To: tooth, U: uterine horn, V: vertebral epiphysis.

4.3 Samples from stranded animals

Sample collection from stranded small cetaceans by the NRIFSF was not conducted during the 2014 fiscal year (from April 2014 to March 2015).

4.4 Analyses/development of techniques

Kishiro and Kozue Ishida (TUMST) examined teeth of Baird's beaked whales taken by small-type whaling in the Pacific coast, and continued to develop the techniques applying the frozen microtome method for age determination of Baird's beaked whales.

Kishiro examined ovaries samples of a total of 132 animals (Baird's beaked whales, southern form short-finned pilot whales, false killer whales, bottlenose and Risso's dolphins) and histological samples of testis of a total of 156 animals (Baird's beaked whales, short-finned pilot whales, false killer whales, bottlenose, striped, and pantropical spotted dolphins) taken by small-type whaling and hand-harpoon fisheries for determination of the sexual maturity. Kishiro also examined vertebral samples of 284 Baird's beaked whales, 20 southern form short-finned pilot whales, and 2 false killer whales for determination of the physical maturity.

Hikari Maeda (NRIFSF) prepared sections for age determination using teeth of a total of 32 southern form short-finned pilot whales taken by hand harpoon fishery in Okinawa and drive fishery in Taiji.

Yoshida carried forward the mtDNA sequence analysis in order to accumulate information on stock structure of small cetaceans around Japan, using tissue samples from 320 animals. Yoshida also advanced stock structure study of Pacific white-sided dolphins, by adding mtDNA sequences obtained from 179samples.

Hiroshi Ohizumi (Tokai University) continued to survey of feeding habits of smaller toothed whales caught in Taiji by small-type whaling and hand harpoon fishery. Stomach contents collected in May 2014 were analysed for two southern form short-finned pilot, three false killer whales, six Risso's, 11 bottlenose, and 11 striped dolphins. Numbers of collecting those samples were also referred in Item 4.2.

Kanaji analysed carbon and nitrogen isotope ratio ($^{13}C/^{12}C$ and $^{15}N/^{14}N$) of several small odontocetes using skin biopsy samples collected from ship-based surveys.

5. STATISTICS FOR SMALL CETACEANS

5.1 For the calendar year 2014

For small-type whaling, the target species, fishing season, quota, catcher boats and actual catches are the same as shown in section 4.2.

For dolphin fisheries, management season has been started on 1 August and closed on 31 July for Dall's porpoise fisheries, and from 1 October to 30 September for other species, since 1996. The management season for fisheries in Wakayama Prefecture has been started on 1 September and closed on 31 August. As has been the case in previous years, the statistics, following the guideline for IWC national progress report, cover catches from 1 January to 31 December 2013, while FAJ manages dolphin fisheries by their own yearly season aforementioned. Thus, in some cases, the calendar yearly catch may exceed the seasonal (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 type of fisheries. The data have been collected by the International Division of the FAJ based on reports from the prefectural governments.

Catch quota for dolphin fisheries for the 2014/2015 season was revised from the last season, that is, 6,524 *dalli*-type Dall's porpoise, 6,404 *truei*-type Dall's porpoises, 478 Risso's dolphins, 615 bottlenose dolphins,560 spotted dolphins, 580 striped dolphins, and 185 southern form short-finned pilot whales. Catch quota for false killer whales (100 animals) and Pacific white-sided dolphins (360 animals) remained constant since 2007/2008 season.

Corresponding operational months by prefecture in 2014 were as follows: hand harpoon fishery for porpoises and dolphins was permitted for nine months (1 January to 31 August and 1-31 December) in Okinawa prefecture; eight months (1 January to 31 August) in Wakayama; six months (1 January to 30 April and 1 November to 31 December) in Aomori, Miyagi, Iwate and Chiba; and 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 the calendar year 2014.

Species	Type of fishery	Prefecture[1)]	Total landed[2)]
Baird's beaked whale	Small-type whaling	Hokkaido	14
		Miyagi	26
		Chiba	30
dalli-type Dall's porpoise	Hand harpoon	Iwate[3)]	14
		Miyagi	2
truei-type Dall's porpoise		Iwate	1,588
		Miyagi	32
Pacific white-sided dolphin	Driving	Wakayama	5(4)
Striped dolphin	Hand harpoon	Wakayama	63
	Driving		367
Pantropical spotted dolphin	Hand harpoon	Wakayama	18
	Driving		145(35)
Bottlenose dolphin	Hand harpoon	Wakayama	35
	Driving		172(78)
Risso's dolphin	Hand harpoon	Wakayama	103
	Driving		260(7)
Southern form short-finned pilot whale	Small-type whaling	Wakayama	2
		Chiba	1
	Driving	Wakayama	41(2)
	Hand harpoon	Okinawa	18
False killer whale	Small-type whaling	Wakayama	3

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

2) Statistics of small-type whaling are based on reports of biologists 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 fishery cooperative unions (other prefectures). In parentheses are numbers of live captured animals which are included into total catch.

3)Small portions of catches by hand harpoon fishery off Hokkaido were reported as meat by fishermen and thus have been converted into the number of *dalli*-type Dall's porpoises at 50kg/porpoise (c.f. Ishikawa et al. 1990) by respective prefectural governments.

5.2 Non-natural mortality for the calendar year 2014

5.2.1 Observed or reported ship strikes

During the mentioned period, no data was collected on ship strikes by small cetaceans.

5.2.2 Fishery bycatch

Provisional figures for incidental mortality of small cetaceans (bycatch) by Japanese fisheries, by Prefecture in January-December 2014, 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 fishery cooperative unions.

Table 6. Fishery bycatch of small cetaceans in the calendar year 2014.

Species	No. of animals	Location[1)]	Fate [2)]	Gear [3)]	Target fish species [4)]	Source or contact
dalli-type	6	Hokkaido	K	FPN	NA	FAJ
Dall's porpoise	3		K	GNS		
Harbour porpoise	1	Hokkaido	K(alive)	FPN		
	2		K	GNS		
	5		K	Unknown		
	1		R			
Finless porpoise	8	Mie	D	GNS		
	1	Hiroshima	K			
	1	Okayama	K	FPN		
	1	Yamaguchi	R	GNS		
	1	Kagawa	R	FPN		
	3	Nagasaki	K			
	3		K	GNS		
Pacific white-sided Dolphin	1	Aomori	D			
	2	Shizuoka	D	FPN		
	1		K(alive)			
Striped dolphin	1	Tokushima	K			
Bottlenose dolphin	1	Iwate	D			
	1	Fukuoka	K(alive)			
Unidentified cetaceans	1	Kagawa	R	MIS		

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

5.3 Strandings of small cetaceans

Provisional figures for strandings of small cetaceans in Japan, for the period January-December 2014, are shown in Table 7. Species and figures are based on reports of prefecture governments to the FAJ, which are reports from individual fishermen, fishery cooperative associations or the general public. No. of post mortems in Table 7 indicated the number of dead animals when they stranded.

Table 7. Strandings of small cetaceans in the calendar year 2014

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)
dalli-type Dall's porpoise	12	12	FAJ
Harbor porpoise	3	3	
Finless porpoise	133	130	
Pacific white-sided dolphin	15	15	
Striped dolphin	5	5	
Short-beaked common dolphin	2	2	
Long-beaked common dolphin	1	1	
Bottlenose dolphin	2	2	
Indo-Pacific bottlenose dolphin	2	2	
Rough-toothed dolphin	1	1	
Fraser's dolphin	1	1	
Risso's dolphin	4	4	
Melon-headed whale	3	3	
Baird's beaked whale	4	4	
Cuvier's beaked whale	4	4	
Stejneger's beaked whale	3	3	
Ginkgo-toothed whale	1	1	
Blainville's beaked whale	1	1	
Pygmy sperm whale	8	7	
Unidentified cetaceans	20	20	

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 studies or analyses on small cetaceans were conducted during the mentioned period.

7. LITERATURE CITED

Ishikawa, H., Fujise, Y., Saino, S. and Zenitani, R. 1990. III. Report on onboard biological research on the dolphin hand harpoon boats in the Okhotsk Sea and waters off the Pacific coast of northern Honshu Island.p53-78. In: Report on dolphin research around Japan (1989 fiscal year). 78pp. Institute of Cetacean Research

8. PUBLICATION ON SMALL CETACEANS

8.1 Published or In Press' papers only

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