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Status Report of Conservation and Researches on the western North Pacific Gray Whales in Japan, May 2018 - April 2019

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KEYWORDS: WESTERN GRAY WHALE, GRAY WHALE SIGHTINGS, GRAY WHALE STRANDING, POP GRAY WHALE SIGHTING

Abstract

Following the IWC Resolution 2001-3, 2004-1 and 2005-3, this paper presents most recent status of conservation and research on the western gray whale conducted by Japan during the period from May 2018 to April 2019. In total of three POP sightings have been reported from the coast of Japan. Two sightings of gray whales were reported from the coast of Ishikawa and Fukui prefecture, in the Sea of Japan, which were eventually identified as an identical animal. Another sighting was reported from Miyake island, one of the Izu archipelago, in the North Pacific. One stranding occurred in Kanagawa prefecture. No anthropogenic mortality due to entanglement has been reported from the adjacent waters off Japan.

Introduction

As provided in IWC Resolution 2001-3, which *inter alia* called on range states and others to actively pursue all practicable actions to eliminate anthropogenic mortality and minimize anthropogenic disturbance to the western gray whale (*Eschrichtius robustus*) population; IWC Resolution 2004-1, which *inter alia* called upon range states to develop or expand national monitoring and research program on western gray whales; and IWC Resolution 2005-3 supporting further efforts to conserve this population, IWC has largely urged the conservation of western gray whales. Under such circumstances, as response to those IWC Resolutions, Japan has provided scientific information on the western gray whales in June 2005 to May 2006 by Kato *et al.* (2006), in June 2006 to May 2007 by Kato *et al.* (2007), from June 2007 to April 2008 by Kato *et al.* (2008) from May 2008 to April 2009 by Kato *et al.* (2009), from May 2009 to April 2010 by Kato *et al.* (2010), from May 2010 to April 2011 by Kato *et al.* (2011), from May 2011 to April 2012 by Kato *et al.* (2012), from May 2012 to April 2013 by Kato *et al.* (2013), from May 2013 to April 2014 by Kato *et al.* (2014), from May 2014 to April 2015 by Kato *et al.* (2015), from May 2015 to April 2016 by Kato *et al.* (2016), from May 2016 to April 2017 by Nakamura *et al.* (2017a) and from May 2017 to April 2018 by Nakamura *et al.* (2018). We hereby submit a similar report for this year's meeting on the information for the period from May 2018 to April 2019. All the known occurrences of the western gray whale around Japanese coasts since 1955 to date are given in Table 1.

Sightings

Systematic Sightings

National Research Institute of Far Seas Fisheries conducted dedicate systematic cetacean sighting surveys using the research vessel off the Japanese coast in the Sea of Japan in July - August 2018 (a total searching distance of 1,636 n. miles) and using the aircraft off the Pacific coast of the northeastern Japan in July (936 n. miles). No gray whale was sighted at the surveys. Konishi *et al.* (2018) reported no gray whale was sighted during the systematic cetacean sampling and sighting survey (6,422 n. miles by whale sampling/sighting vessels) made under the 2018 NEWREP-NP - offshore component in 18 May to 15 August 2018 in northwestern North Pacific. In addition, Isoda *et al.* (2019) and Yoshida *et al.* (2019) reported no gray whale was sighted during the 2018 NEWREP-NP - coastal components at Ayukawa (Miyagi), Hachinohe (Aomori), Kushiro (Eastern Hokkaido), and Abashiri (Northeastern Hokkaido) in April to October 2018.

POP sightings during small-type whaling and dolphin fishery operations

There was no additional report of gray whale sighted by POP bases from all of small-type whaling and dolphin fisheries operations in May 2018 to April 2019.

Other POP sightings

From March 8th to 15th, 2019 two sightings of the gray whales have been reported from the coast off Ishikawa and Fukui prefecture, in the Sea of Japan (Fig.1). The first case was identified from the video, posted to the YouTube by the residents of Ishikawa prefecture. In the March 8th a gray whale was appeared at the coast of Kaga, Ishikawa prefecture (36°22.04'N-136°20.49'E). The second case was identified from the picture taken at the Namimatsu beach of Arawa city, Fukui prefecture (36°16.04'N-136°11.42'E) in March 15th (Fig.2). From the external characters such as white patch and scars, these animals were identified as an identical animal (Table 1). In April 22nd, a young animal, about 9m in body length was sighted off Miyake island which locates in northern part of the Izu archipelago. A local cameraman recorded the movie when this animal was diving in the western part of Miyake island (34°4.122'N-139°28.48'E).

Mortality

Stranding (including beached animals)

In April 11st an immature (8.77 m in body length) male beached at Manazuru, Kanagawa prefecture (35°8.55'N-139°9.61'E) after several days since it's death (Fig. 3, 4). No scars and human induced injuries were confirmed to remain on the body surface, when this animal was dissected in April 18th. Skeleton, internal organs and skin tissues for DNA analysis have been collected.

Entanglement

No entanglement of gray whale was known during the period concerned.

Administrative action

Given the increase of the number of sighting of gray whales in Japanese coastal waters, on 27 April 2016, the FAJ issued a notification to all coastal prefectural governments to draw their attention to the increasing sightings of gray whales, and to further request them to remind relevant coastal communities including local fishermen of the relevant regulations concerning the conservation of gray whales (live release of animals incidentally taken as well as prohibition of possession and sale thereof). Furthermore, the FAJ made this notification publicly available on its website in order to enhance further public awareness on the conservation of gray whales. Following the advice on

sightings of a gray whale, FAJ reminded the Ishikawa and Toyama Prefectural Governments on 13 March 2019 to advise local fishermen relevant regulations on conservation of gray whales, and the same reminding was made on 18 March 2019 to the Fukui Prefectural Government and on 23 April 2019 to the Tokyo Metropolitan Government.

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Table 1. All known and reported gray whale occurrences around Japan since 1955 to present (till April 2019).

Date dd/mm/yy	From which waters	Region	Sexual status and other	n	Source	
					Status	Reference
16/03/1955	Toyama (Toyama Bay) 36°41'N – 137°12'E	Sea of Japan	?	1	Entanglement	Nambu <i>et al.</i> (2003)
10/06/1959	Off Kii-Ohshima, Kushimoto, Wakayama 33°29'N – 135°55'E	Pacific	?	1	Sighting	Nishiwaki and Kasuya (1970)
02/02/1968	Off estuary of Kumano River, Shingu, Wakayama 36.02E33°43'N – 136°02'E	Pacific	Juvenile 9.0 m female	1	Unknown*1	Nishiwaki and Kasuya (1970)
??/04/1970	Toyama (Toyama Bay) 36.41N-137.12E	Sea of Japan	?	1	Entanglement	Nambu <i>et al.</i> (2003)
27/03/1982	Off Toba (Ise Bay), Mie 34°28'N – 136°53'E	Pacific	Juvenile*2	1	Sighting	Furuta (1984)
25/04/1985	Off Taiji, Wakayama 33°34'N – 136°01'E	Pacific	Juvenile	1	Sighting (through TV)	Kasamatsu and Ishikawa (1990)
25/01/1990	Kohzu, Kanagawa 35°16'N – 139°13'E	Pacific	Juvenile 8.0 m male	1	Beached	Kasamatsu and Ishikawa (1990)
Middle/04/ 1993	Off Izu-Ohshima, Tokyo 34°30'N – 139°30'E	Pacific	Juvenile	2*3	Sighting	Mochizuki, Mori and Ishikawa (p.c.)
07/04/1995	Toyokoro, Obihiro, Hokkaido 42°35'N – 143°32'E	Pacific	Juvenile 9.5 m female	1	Beached	Sawamura and Kimura (p.c.)
16/05/1996	Suttu, Hokkaido 42°45'N – 140°10'E	Sea of Japan	Adult	1	Entanglement	Fisheries Agency
02/03/1997	Matunami, Kashiwazaki, Niigata 37°24'N – 138°34'E	Sea of Japan	?	1	Beached (skull only)	ICR (2005)
22/07/1997	Off Kumanoura, Saga, Kumamoto 33°06'N – 133°09'E	Pacific	Juvenile	2	Sighting	Kato and Tokuhiko (1997)
19/03/2002	Miyazaki beach, Miyazaki 31°35'N – 131°27'E	Pacific	Juvenile Est. 7.7 m	1	Beached	Kato <i>et al.</i> (2003)
06/05/2003	Off Shizuoka (Suruga Bay), Shizuoka 35°00'N – 138°46'E	Pacific	Juvenile, 9-10 m	2	Sighting	Shizuoka TV Asahi
11/05/2005	Tomiyama (Tokyo Bay), Chiba 35°04'N – 139°49'E	Pacific	Juvenile, 7.81 m	1	Entanglement	Kato <i>et al.</i> (2005)
15/07/2005	Enoshima, Onagawa Miyagi 38°23'N – 141°37'E	Pacific	Cow (12.79 m) Calf (7.75 m)	2	Entanglement	Kato <i>et al.</i> (2006)
18/01/2007	Sanriku, Ofunato, Iwate 39°09'N – 141°54'E	Pacific	Female 9.19 m	1	Entanglement	Kato <i>et al.</i> (2007)
01/08/2007	Nishikioka, Tomakomai, Hokkaido 42°36'N – 141°30'E	Pacific	Female 12.33 m	1	Beached	Kato <i>et al.</i> (2008)
04/11/2009	Off Owase, Mie 33°52'N – 136°10'E	Pacific	Juvenile, Ca. 6 – 7 m	1	Sighting	Kato <i>et al.</i> (2010)
12/03/2012	Off Irako, Tawara, Aichi 34°36'N – 137°01'E	Pacific	Juvenile	1	Sighting	Kato <i>et al.</i> (2012), Ohike <i>et al.</i> (in prep)

06/04/2014	Off Teradomari, Niigata 37°38'N – 138°48'E	Sea of Japan	Adult, juvenile *4	2	Sighting	The Asahi Newspaper and by direct sighting by S. Nishiwaki
17/03/2015	Off Kozushima Island 34°13'N – 139°09'E	Pacific	Sub-adult	1	Sighting	https://www.facebook.com/aquamatedivingclub
31/03/2015	Off Teradomari, Niigata 37°38'N – 138°48'E	Sea of Japan	Adult	1	Sighting	The Asahi Newspaper
19/04/2015	Off Miho, Shizuoka 35°00'N – 138°31'E	Pacific	Sub-adult	1	Re-sighting of Kozushima ind. In May 2015	Direct sighting by H. Ohizumi
12/01/2016	Off Nishi-Kawana, Tateyama, Chiba, 34°57.416'N-139°45.103'E	Pacific	Unknown	1*5	Re-sighting of Kozushima ind. In May 2015	http://nop.chips.jp/frame/003.html
04/03/2016	Wadoura, Minamiboso, Chiba, 35°2.085'N-140°1.05'E	Pacific	Juvenile, 8.9 m female	1	Beached	Direct survey by G. Nakamura
05/04/2016	Arai beach, Ito, Shizuoka, 34°58.06'N - 139°07.40'E	Pacific	ca. 7 m	1	Beached	http://izu-np.co.jp/ito/news/20160406iz0000000018000c.html
22/02/2017	Off Yokosuka, Kanagawa, 35°19.55'N -139°40.27'E	Pacific	Unknown	1	Sighting	https://www.facebook.com/masamichi.saita?pnref=story
18-23/04/2017	Off Futtsu, Chiba, 35°19.37'N-139°45.87'E	Pacific	Unknown	1	Sighting	http://news.tbs.co.jp/newseye/tbs_newseye3031425.html
2/5/2017	Aogashima Island, Tokyo, 32°27.26'N-139°46.535'E	Pacific	Unknown	1	Sighting	https://eternal0love.wordpress.com/2017/05/02 (Not available after January 2018)
10/2/2018	Aogashima, Tokyo, 32°28.2'N-139°45.4'E	Pacific	Juvenile	1	Sighting	Personal communication
8/3/2019	off Kaga, Ishikawa, 36°22.04'N-136°20.49'E	Sea of Japan	Unknown	1	Sighting	https://www.youtube.com/watch?v=VkMnw1znZPM
15/3/2019	off Arawa, Fukui, 36°16.04'N-136°11.42'E	Sea of Japan	Unknown	1*6	Sighting	https://www.chunichi.co.jp/article/fukui/20190316/CK2019031602000021.html
11/4/2019	Manazuru, Kanagawa, 35°8.55'N-139°9.61'E	Pacific	Juvenile, 8.77 m male	1	Beached	Direct survey by Taru, Suzuki and Nakamura.
22/4/2019	Miyake Island, Tokyo, 34°4.122'N-139°28.48'E	Pacific	Juvenile, ca. 9 m	1	Sighting	https://www3.nhk.or.jp/news/html/20190423/k10011893291000.html https://youtu.be/DlmsNKSCB_8

*1: Nishiwaki and Kasuya (1970) reported as “Dead might be caused by the wound made by someone during the evening of the day”.

*2: Furuta (1984) estimated animal length to be 12m, but photographs of the animal clearly indicate much smaller length indicating juvenile.

*3: There was an alternative that one additional animal was seen in adjacent waters.

*4: There are some possibilities those were cow and calf pair, but they did not occur as one unit at the same time.

*5: From May 2015 to April 2016, two more sightings have been recorded. One of which was sighted at Akasawa, Ito City, Shizuoka prefecture (34°51.101'N-139°5.771'E) on January 12, 2016 and the another one was sighted at Miike port of Miyake Island, Tokyo. According to Nakamura *et al.* (2017b), these animals were re-sighting of Kozushima individual in 2015.

*6: Re-sighting of Kaga animal in 2019.

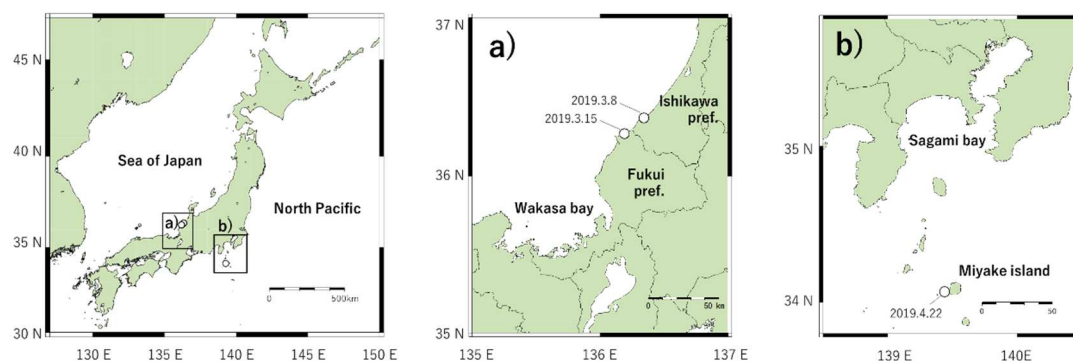


Fig. 1 Geographical location of the sightings of the gray whales around Japanese coasts during the period in May 2018 to April 2019.



Fig. 2 Dorsal surface of the gray whale taken at the Namimatsu beach of Arawa city, Fukui prefecture in the March 15th, 2019.



Fig. 3 Beached animal at Manazuru, Kanagawa prefecture. This picture was taken in April 13th.

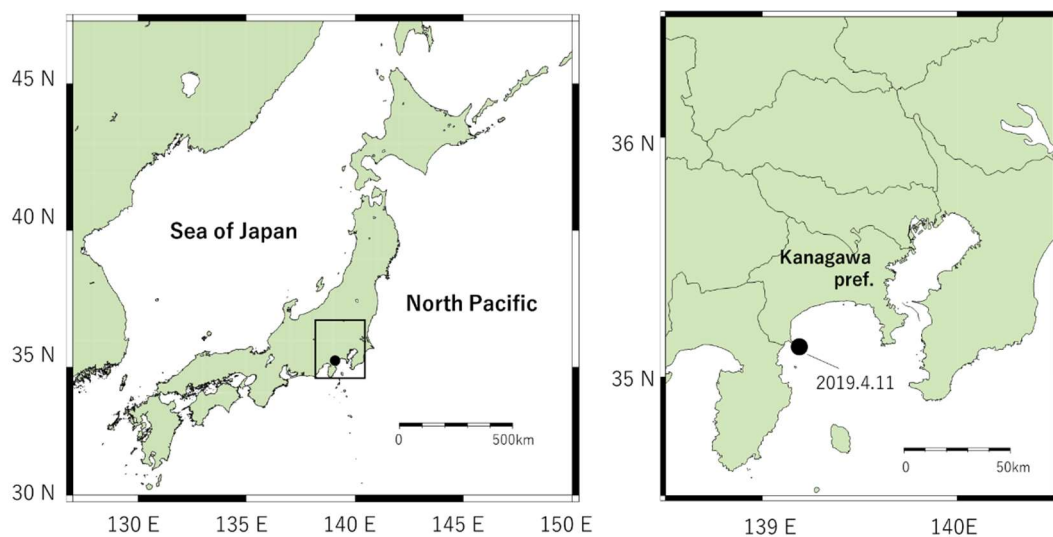


Fig. 4 Geographical location of the gray whale was stranded at Manazuru, Kanagawa prefecture.