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Status Report of Conservation and Research on the western North Pacific Gray Whales in Japan, May 2020 - April 2021

Gen Nakamura, Makana Nio, Hideyoshi Yoshida, Tatsuya Isoda, Koji Matsuoka, Takeharu Bando, Hidehiro Kato



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GEN NAKAMURA¹⁾, MAKANA NIO²⁾, HIDEYOSHI YOSHIDA³⁾, TATSUYA ISODA⁴⁾, KOJI MATSUOKA⁴⁾, TAKEHARU BANDO⁴⁾ and HIDEHIRO KATO^{1,4)}

- 1) Tokyo University of Marine Science and Technology, 4-5-7 Konan, Minato-ku, Tokyo 108-8477, Japan
- 2) Fisheries Agency, Ministry of Agriculture, Forestry and Fisheries, 1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8907, Japan
- 3) Fisheries Resources Institute, Japan Fisheries Research and Education Agency, Fukuura 2-12-4, Kanazawa-ku, Yokohama, Kanagawa 236-8648, Japan
- 4) Institute of Cetacean Research, 4-5 Toyomi-cho, Chuo-ku, Tokyo 104-0055, Japan

Contact e-mail: gnakam1@kaiyodai.ac.jp

ABSTRACT

The International Whaling Commission (IWC) adopted Resolutions 2001-3, 2004-1 and 2005-3 on Western North Pacific gray whale's conservation and research. On a voluntary basis, this paper presents Japan's information on conservation and research on the western gray whale for the period from May 2020 to April 2021, which is relevant to those resolutions. Neither sightings nor anthropogenic mortality due to entanglement or other causes have been reported from the coast of Japan during the period investigated. On research, one old skeletonized remain was found and collected from the coast of Hokkaido prefecture, and it is under study.

KEYWORDS: GRAY WHALE; INCIDENTAL SIGHTINGS; STRANDINGS

INTRODUCTION

Several resolutions on research and conservation of Western North Pacific gray whale have been adopted by the International Whaling Commission (IWC). 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 supports further efforts to conserve this population. Under such circumstances, and as response to those IWC Resolutions, Japan has provided its annual scientific reports on the western gray whales from 2005 to 2020.

At the 68a meeting of the IWC Scientific Committee (IWC SC) in 2019, Japan expressed its intention to continue contributing with scientific information even after its withdrawal from the International Convention for the Regulation of Whaling (ICRW) in June 2019, and consequently Japan voluntarily provided its progress report on western North Pacific gray whales at the 68b meeting of the SC in 2020.

The present report provides information on gray whales in Japan for the period from May 2020 to April 2021. All the known records of the western gray whale around the Japanese coasts since 1955 to date are given in Table 1.

SIGHTINGS

Systematic sightings

Murase *et al* (2021) reported that no gray whale was sighted in the Central North Pacific, north of 40°N to 52°N, between 160°E and 180°E (high sea), during the systematic cetacean sighting survey conducted under the 2020 IWC-Pacific Ocean Whale and Ecosystem Research (POWER) survey between July and September.

Platform of Opportunity (POP) sightings

There was no additional report of gray whales sighted by POP platforms during the commercial whaling and dolphin fisheries operations in May 2020 to April 2021. Also no sightings from other POP platforms were reported.

MORTALITY

Stranding (including beached animals)

No stranding of gray whale was reported during the period concerned. However, old skeletonized remains of a gray whale were found by local citizens at the beach of Notoro lake, Abashiri, Hokkaido prefecture on 20 July, 2020. From the morphological characterization of the skull and mandible, this animal was identified as gray whale. The skull was almost completely skeletonized and the part of the skull, right mandible, five vertebras, one epiphysial plate and one finger bone have been collected and stored at Abashiri Kyodoshiryokan (Abashiri folk museum). This material is under study.

Entanglement

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

Administrative action

Given the increase in the number of sightings of gray whales in Japan's coastal waters, on 27 April 2016, the Fisheries Agency of Japan (FAJ) issued a notification to all coastal prefectural governments. The purpose of the notification was to draw their attention to the increasing sightings of gray whales, and to remind relevant coastal communities (including local fishermen) through prefectural governments on the relevant regulations concerning the conservation of gray whales (release of live whales incidentally taken as well as the prohibition of possession and sale of their whale products). No sighting of gray whale was reported from the prefectures during the report period.

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Table 1. Reported gray whales around Japan since 1955 to present (April 2020).

| Date dd/mm/yyyy | Geographical locality | Ocean | Biological data | n | Source | |
|--------------------|----------------------------------------------------------------------------------------|-----------------|-----------------------------------|-----|-----------------------|------------------------------------------------------------------|
| | | basin | | | 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 Off estuary of Kumano | Pacific | ? | 1 | Sighting | Nishiwaki and Kasuya (1970) |
| 02/02/1968 | 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 Tokuhiro (1997) |
| 19/03/2002 | Miyazaki beach, Miyazaki 31°35'N – 131°27'E | Pacific | Juvenile Est. 7.7 m | 1 | Beached | Kato et al. (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 et al. (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 et al. (2006) |
| 18/01/2007 | Sanriku, Ofunato, Iwate 39°09'N – 141°54'E | Pacific | Female 9.19 m | 1 | Entanglement | Kato et al. (2007) |
| 01/08/2007 | Nishikioka, Tomakomai, Hokkaido 42°36'N – 141°30'E | Pacific | Female 12.33 m | 1 | Beached | Kato et al. (2008) |
| 04/11/2009 | Off Owase, Mie 33°52'N – 136°10'E | Pacific | Juvenile, Ca. 6 – 7 m | 1 | Sighting | Kato et al. (2010) |
| 12/03/2012 | Off Irako, Tawara, Aich 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/aquamatediving club |

| 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/fra me/003.html |
| 04/03/2016 | Wadaura, 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/201 60406iz00000000180 00c.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/n ewseye/tbs_newseye3 031425.html |
| 02/05/2017 | Aogashima Island, Tokyo, 32°27.26'N- 139°46.535'E | Pacific | Unknown | 1 | Sighting | https://eternal0love.w ordpress.com/2017/05 /02 (Not available after January 2018) |
| 10/02/2018 | Aogashima, Tokyo, 32°28.2'N-139°45.4'E | Pacific | Juvenile | 1 | Sighting | Personal communication |
| 08/03/2019 | off Kaga, Ishikawa, 36°22.04'N- 136°20.49'E | Sea of Japan | Unknown | 1 | Sighting | https://www.youtube. com/watch?v=VkMn w1znZPM |
| 15/03/2019 | 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/201 90316/CK201903160 2000021.html |
| 11/04/2019 | 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. |
| 22/04/2019 | Miyake Island, Tokyo, 34°4.122'N-139°28.48'E | Pacific | Juvenile, ca. 9 m | 1 | Sighting | https://www3.nhk.or.j p/news/html/2019042 3/k10011893291000. html https://youtu.be/D |
| 13/05- 02/06/2019 | off Kahoku, Ishikawa, 36°45.2'N-136°41.8'E | Sea of Japan | Unknown | 1*6 | Sighting | https://headlines.yaho o.co.jp/videonews/nn n?a=20190514- 00000335-nnn-soci https://www.oricon.co jp/article/810434/ |
| 20/07/ 2020* ⁷ | Beach of Notoro lake, Abashiri, Hokkaido, 44°6.295'N-144°9.389'E | Sea of Okhots k | Unknown | 1 | Beached | Fisheries Agency |
| | | | . | | | |

^{*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.* (2017), these animals were re-sighting of Kozushima individual in 2015.

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

^{*7:} The date of skeletonized remain was found.

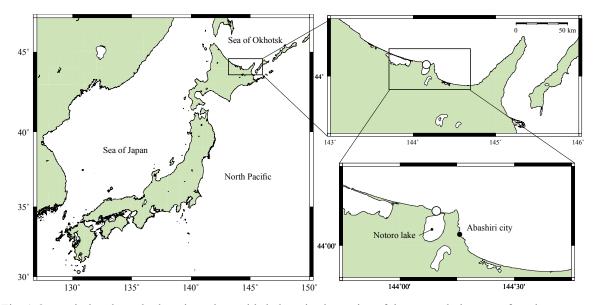


Fig. 1 Open circles show the location where old skeletonized remains of the gray whales were found on 20 July, 2020.