

Status report of conservation and researches on the Western North Pacific gray whales in Japan, May 2012 – April 2013. by Kato, H., Miyashita, T., Kishiro, T., Kanda, N., Bando, T., Mogoe, T., Nakamura, G. and Sakamoto, T.

Status Report of Conservation and Researches on the Western North Pacific Gray Whales in Japan, May 2012 – April 2013

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Abstract

Following the IWC Resolution 2001-3, 2004-1 and 2005-3, this paper reports status of conservation and research on the western gray whale. No mortality due to stranding/by-catch has been reported from the adjacent waters off Japan during the period from May 2012 to April 2013, and no sighting was made in neritic waters around Japanese coast. A study on skeletal morphology on 5 gray whales beached on the coast was made during the period concerned, which suggested possible expansion of the eastern stock to western region of the North Pacific.

Introduction

As 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 programme 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 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) and from May 2011 to April 2012 by Kato *et al.* (2012). We hereby submit a similar report for this year's meeting on the information for the period from May 2012 to April 2013.

All known occurrences of the western gray whale around Japanese coasts since 1955 are summarized in Table 1.

Sightings

Systematic Sightings

Miyashita *et al.* (2013) compiled sighting information of all large cetaceans encountered during all of systematic whale sighting surveys by National Research Institute of Far Seas Fisheries. While a total of 4,381.6 n. miles for their searching distances, no gray whale was seen. Bando *et al.* (2013) reported sightings from the systematic manner (2,326n. miles by whale sampling survey; 8,748n. miles by dedicated sighting survey; 812 n. miles by whale prey species survey made at JARPN II – offshore component in 16 May to 3 October 2012, but no gray whale was found. Also, Yasunaga *et al.*

(2013) and Yoshida *et al.* (2013) reported no gray whale from sightings by JARPN II – coastal component at Sanriku and Kushiro (Hokkaido) in April to October 2012.

POP sightings during small-type whaling and dolphin fisheries

There was no additional report of gray whale sightings by POP bases from all of small-type whaling and dolphin fisheries operations in May 2012 to April 2013.

Other POP sightings

No other type sighting of gray whale has been made around Japanese coast.

Mortality

Stranding

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

Entanglement

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

Research Activities

As partly reported in the last year's status report, Nakamura and Kato (in prep.) examined skeletal morphology on the five gray whale skeletons beached around Japanese coast in 1995 - 2005. It was found these beached five animals shared substantial similarities on the vertex region of the skull with those of eastern gray whales, while different from those of reported western animals by Andrews (1914). This may suggest possible expansion of the eastern stock to western region of the North Pacific. It is expected that further details on this study will be reported somewhere in due course.

Kanda and his colleagues started checking the status of tissue samples collected from the gray whales which have stranded or been entangled as well as stored at the ICR and others since 1996. It is expected to report the list to the IWC/SC meeting by a separate document.

Administrative action

As the continuation of its educational program, the Fisheries Agency of Japan (FAJ) released the updated Manual for Coping with Stranding of Cetaceans on May 10, 2012. It was distributed to all coastal prefectures with an administrative circular drawing attention to the importance of appropriate treatment and protection of gray whale. The 142 page manual deals with various aspects, such as legal, administrative and technical, related to coping with entrapment/entanglement and by-catch as well as stranding of cetaceans. It reflects updated information of relevant laws and regulations, including the prohibition of catch, sale and possession of gray whales under the Fisheries Resources Protection Act.

As for the gray whale sighted off Irako (Aichi prefecture) on March 12, 2012, the FAJ issued an administrative circular to neighboring prefectural governments in order to draw attention of relevant

parties including local fishermen to the presence of the gray whale, request them to avoid entanglement, and remind them of regulation regarding the gray whale. With these efforts, neither by-catch nor stranding occurred. The sighting also drew attention from media.

Acknowledgements

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Table 1. All known and reported gray whale occurrences around Japan since 1955 to present (till April 2013).

Date dd/mm/yy	From which waters	Pacific side ?	Juvenile?	n	Source	
					Status	Reference
16/03/1955	Toyama (Toyama Bay) 36.41N-137.12E	Sea of Japan	?	1	Entanglement	Nambu <i>et al.</i> (2003)
10/06/1959	Off Kii-Ohshima, Kushimoto, Wakayama 33.29N-135.55E	Pacific	?	1	Sighting	Nishiwaki and Kasuya (1970)
02/02/1968	Off estuary of Kumano River. Shingu, Wakayama 33.43N-136.02E	Pacific	Juvenile 9.0m female	1	Unknown*	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 34.28N-136.53E	Pacific	Juvenile**	1	Sighting	Furuta (1984)
25/04/1985	Off Taiji, Wakayama 33.34N-136E	Pacific	Juvenile	1	Sighting (through TV)	Kasamatsu and Ishikawa (1990)
25/01/1990	Kohzu, Kanagawa 35.16N-139.13E	Pacific	Juvenile 8.0m male	1	Beached	Kasamatsu and Ishikawa (1990)
Middle/04/ 1993	Off Izu-Ohshima, Tokyo 34.30N-139.30E	Pacific	Juvenile	2***	Sighting	Mochizuki, Mori and Ishikawa (p.c.)
07/04/1995	Toyokoro, Obihiro, Hokkaido 42.35N-143.32E	Pacific	Juvenile 9.5m female	1	Beached	Sawamura and Kimura (p.c.)
16/05/1996	Suttu, Hokkaido 42.45N-140.10E	Sea of Japan	Adult	1	Entanglement	Fisheries Agency
02/03/1997	Matunami, Kashiwazaki, Niigata 37.24N-138.34E	Sea of Japan	?	1	Beached (skull only)	ICR (2005)
22/07/1997	Off Kumanoura, Saga, Kochi 33.06N-133.09E	Pacific	Juvenile	2	Sighting	Kato and Tokuhiko (1997)
19/03/2002	Miyazaki beach, Miyazaki 31.50N-131.27E	Pacific	Juvenile Est. 7.7m	1	Beached	Kato <i>et al.</i> (2003)
06/05/2003	Off Shizuoka (Suruga Bay), Shizuoka 35.00N-138.46E	Pacific	Juvenile, 9-10m	2	Sighting	Shizuoka TV Asahi
11/05/2005	Tomiyama (Tokyo Bay), Chiba 35.04N-139.49E	Pacific	Juvenile, 7.81m	1	Entanglement	Kato <i>et al.</i> (2005)
15/07/2005	Enoshima, Onagawa Miyagi 38°23'N - 141°37'E	Pacific	Cow (12.79m) Calf (7.75m)	2	Entanglement	Kato <i>et al.</i> (2006)
18/01/2007	Sanriku, Ofunato, Iwate 39°09'N - 141°54'E	Pacific	Female 9.19m	1	Entanglement	Kato <i>et al.</i> (2007)
01/08/2007	Nishikioka, Tomakomai, Hokkaido	Pacific	Female 12.33m	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)

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

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

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

References

- Andrews, R. C. 1914. Monographs of the Pacific Cetacea. I. The California gray whale (*Rhachianectes glaucus* Cope). Its history, external anatomy, osteology and relationships. Memoirs of the American Museum of Natural History 1: 227-287.
- Bando, T., Mogoe, T., Isoda, T., Wada, A., Mori, M., Tsunekawa, M., Tamahashi, K., Moriyama, R., Miyakawa, N., Kadowaki, I., Watanabe, H., and Ogawa, T. 2013. Cruise Report of the second phase of the Japanese Whale Research Program under Special Permit in the Western North Pacific (JARPN II) in 2012 (part I) - Offshore component – Paper SC/65a/Ox presented to the 65th IWC/SC meeting. 34pp.
- Kanda, H., Goto, M., Iiyashenko, V. Yu., Pastene, L. 2010. Preliminary mt DNA analysis of gray whales from Japan and Russia. Document submitted to the 62nd IWC/SC annual meeting. SC/62/BRG5. 8pp.
- Furuta, M. 1984. Note on a gray whale found in the Ise bay on the Pacific coast of Japan. *Sci. Rep. Whales Res Inst.* 35:195-7.
- Kasamatsu, F. and Ishikawa, H. 1990. Current sightings and stranding of gray whale in the adjacent waters and coast of Japan. Document submitted to the IWC/SC special meeting on gray whales, April 1990, Seattle C/A90/G31. 5pp.
- Kato, H. and Tokuhiko, Y. 1997. A sighting of gray whale off Kochi, southwest Japan in July 1997, with some notes on its possible migration in adjacent waters of Japan. Document submitted to the 49th IWC/SC annual meeting. SC/49/AS17. 7pp.
- Kato, H., Zenitani, R. and Sueyoshi, T. 2003. A western North Pacific gray whale carcass chanced to be found on the beach of Miyazaki, southern Japan in March 2002, with some skeletal measurements. Document submitted to the 55th IWC/SC annual meeting. SC/55/BRG12. 7pp.
- Kato, H., Ishikawa, H., Mogoe, T. and Bando, T. 2005. Occurrence of a gray whale, *Eschrichtius robustus*, in the Tokyo Bay, April – May 2005, with its biological information. SC/57/BRG18 11pp.
- Kato, H., Ishikawa, H., Bando, T., Mogoe, T. and Moronuki, H. 2006. Status Report of Conservation and Researches on the Western Gray Whales in Japan, June 2005– April 2006. Paper SC/58/O 14 presented to 58th IWC/SC meeting. 11pp.
- Kato, H., Ishikawa, Goto, M., Miyashita, T and Moronuki, H. 2007. Status Report of Conservation and Researches on the Western Gray Whales in Japan, June 2006– April 2007. Paper SC/59/O 18 presented to 59th IWC/SC meeting. 11pp.
- Kato, H., Ishikawa, H., Miyashita, T., Takaya, S. and Moronuki, H. 2008. Status Report of Conservation and Researches on the Western Gray Whales in Japan, May 2007 – April 2008. Paper SC/60/O8 presented to 60th IWC/SC meeting. 10pp.
- Kato, H., Miyashita, T., Ishikawa, H., Koya, T., Takaya, S. and Uoya, T. 2009. Status Report of Conservation and Researches on the Western Gray Whales in Japan, May 2008– April 2009. Paper SC/61/O8 presented to 61st IWC/SC meeting. 6pp.
- Kato, H., Miyashita, T., Kanda, N., Ishikawa, H., Furukawa, H. and Uoya, T. 2010. Status Report of Conservation and Researches on the Western Gray Whales in Japan, May 2009 – April 2010. Paper SC/62/O7 presented to 62nd IWC/SC meeting. 6pp
- Kato, H., Miyashita, T., Kanda, N., Ishikawa, H., Kishiro, T., Furukawa, H. and Uoya, T. 2011. Status Report of Conservation and Researches on the Western North Pacific Gray Whales in Japan, May 2010 – April 2011. Paper SC/63/O8 presented to 63rd IWC/SC meeting. 5pp.
- Kato, H., Miyashita, T., Kishiro, T., Kanda, N., Tamura, T., Ishikawa, H., Ohike, T., Asai, Y., Yoshioka, M., Sakamoto, T., and Hiruma, S. 2012. Status Report of Conservation and Researches on the Western North Pacific Gray Whales in Japan, May 2011 – April 2012. Paper SC/64/O8 presented to 64rd IWC/SC meeting. 6pp.
- Miyashita, T., Pastene, L. and Kato, H. 2013. Japan progress report on cetacean research, April 2012 to March 2013, with statistical data for the calendar year 2012. 65a/SC/Progrep Japan. XXpp.
- Nambu, H., Yamada, K.T., Ishikawa, H. 2003. Gray whale records in Toyama Bay. Abstract. 1p. 14th annual meeting of the Sea of Japan Cetology Research Group. (in Japanese).
- Nishiwaki, M. and Kasuya, T. 1970. Recent record of gray whale in the adjacent waters of Japan and a consideration on its migration. *Sci.Rep.Wholes Res.Inst.*22:29-37.
- Yasunaga, G., Itou, N., Oikawa, H., Nakamura, G., Maeda, H., Inoue, S., Miyakawa, N., Kitayama, K., Kadowaki, I., Tamai, N., Ishikawa, Y., Ishida, K., Suzuki, N., Kobayashi, N., Sato, H., Kumagai, S., Sakamoto, N. and Kato, H. 2013. Cruise report of the Second Phase of the Japanese Whale Research

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Program under Special Permit in the Western North Pacific (JARPN II) in 2012 (part II) - Coastal component off Sanriku survey –. Paper SC/65/O* presented to the 65th IWC Scientific Committee, June 2013 (unpublished). 19pp.

Yoshida, H., Ito, N., Kishiro, T., Miyashita, T., Yasunaga, G., Hara, T., Nakamura, G., Maeda, H., Inoue, S., Tsutsumi, T., Ishida, K., Tamai, N., Kadowaki, I., Oka, S., Takahashi, M., Fukumoto, A., Kumagai, S., Sato, H., Sakamoto, N., Kitayama, K., Kobayashi, N., and Kato, T. 2013. Cruise report of the second phase of the Japanese Whale Research Program under Special Permit in the western North Pacific (JARPN II) in 2012(Part III)-Coastal component off Kushiro. Paper SC/65a/Ox presented to the 65th IWC/SC meeting. XXpp.